MANAGEMENT PLAN

November 2003

for Stikine Country Protected Areas

Mount Edziza Provincial Park
Mount Edziza Protected Area (Proposed)
Stikine River Provincial Park
Spatsizi Plateau Wilderness Provincial Park
Gladys Lake Ecological Reserve
Pitman River Protected Area
Chukachida Protected Area
Tatlatui Provincial Park

BRITISH COLUMBIA

Ministry of Water, Land
and Air Protection
Environmental Stewardship
Division
Skeena Region

105-03190/

Stikine Country Protected Areas

MANAGEMENT PLAN

November 2003

Prepared by
Skeena Region
Environmental Stewardship Division
Smithers BC

BRITISH COLUMBIA

Stikine Country
Protected Areas

Management Plan

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Preface

The Stikine Country Protected Areas System contains the following protected areas:

- Mount Edziza Provincial Park;
- Mount Edziza Protected Area (proposed);
- Stikine River Provincial Park;
- Spatsizi Plateau Wilderness Provincial Park;
- Gladys Lake Ecological Reserve;
- Pitman River Protected Area;
- Chukachida Protected Area; and,
- Tatlatui Provincial Park;

Management of these protected areas follows provincial government legislation and Environmental Stewardship Division policies and is subject to First Nations rights as established in court decision or subsequent treaties. In addition, management guidelines provided by the Cassiar Iskut-Stikine Land and Resource Management Plan (LRMP) apply to some of the newly designated protected areas, and to additions to existing protected areas including:

- all of Stikine River Provincial Park;
- all of Pitman River Protected Area;
- all of Chukachida Protected Area;
- the Metsantan addition to Spatsizi Plateau Wilderness Provincial Park;
- the Mount Brock addition to Spatsizi Plateau Wilderness Provincial Park;
- the Klastline addition to Mount Edziza Provincial Park;
- the Mess Creek addition to Mount Edziza Provincial Park; and,
- the Mount Edziza Protected Area (proposed).

Following the recommendations of the Cassiar Iskut-Stikine LRMP, the Mount Edziza Resource Management Zone will replace the existing Mount Edziza Recreation Area. This resource management zone will be managed as Crown land with no protected area status.

The proposed Mount Edziza Protected Area has been removed from Mount Edziza Provincial Park and will be reclassified as a protected area under the *Environment and Land Use Act* (*ELU Act*) to accommodate road access if potential mining activity in the Mount Edziza Resource Management Zone occurs. If a road is required through the proposed Mount Edziza Protected Area, the road corridor will remain under *Environment and Land Use Act* protected area status and the balance of the protected area will be upgraded to Class A park status. The proposed Mount Edziza Protected Area has not yet been established.

In this document, the Stikine Country Protected Areas System refers to all Class A parks, ecological reserves and *ELU Act* protected areas. When the term "protected areas" is used in lower case letters (except in capitalized titles), it includes all types of protected areas including Class A parks, ecological reserves and *ELU Act* protected areas. Where individual *ELU Act* designated protected areas are referred to, "Protected Area" or "Protected Areas" is capitalized.

Information on ecosection representation in the Stikine Country Protected Areas System was compiled for the Stikine Country Protected Areas Technical Background Information Summary that was completed in 2000. Ecosection representation information in this management plan includes new protected area boundaries but does not include recent updates to the ecosection map.

To distinguish between different types of prior uses in the Stikine Country Protected Areas System, the terms traditional use and historical use are used. The term "traditional use" refers to use or activities by First Nations that have occurred over time, while the term "historical use" refers to use by the non-native community.

In this management plan, "Tahltan Nation" refers to the confederation of Tahltan families, including both the Tahltan Band Council and Iskut First Nation. The Tahltan Band Council refers to the Tahltan band, as defined in the *Indian Act*, and is based in Telegraph Creek and Dease Lake and the Iskut First Nation is based in Iskut. "First Nations" refers to First Nations with traditional territories in Stikine Country Protected Areas.

This management plan is without prejudice to the position that either First Nations or the Province may take in treaty negotiations or court proceedings.

Just prior to developing the Stikine Country Protected Areas Management Plan, a new government was elected in British Columbia (2001) and some restructuring of ministries occurred. This management plan references a number of documents and agreements that were finalized prior to the change in government, and are therefore referenced with the former government agency and ministry names.

Ongoing consultation with First Nations, the proposed Stikine Country Protected Areas Advisory Committee, stakeholders and the public may result in the need for minor revision of this plan from time to time. Major revision of this plan would require a broader public involvement process.

A glossary is included to provide technical definitions for some terms.

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1 Introduction

1.1 Planning Process

Environmental Stewardship Division prepares a management plan to guide the management of a protected area over the next ten to twenty years. A management plan provides long-term vision and strategic guidance for the management and stewardship of Class A parks, ecological reserves and protected areas designated by the *Environment and Land Use Act* (*ELU Act*) and sets out objectives and strategies for conservation, development, interpretation and operation of a protected area. The plan relies on current information relating to such subjects as natural values, cultural values, and recreation opportunities within a protected area and resource activities occurring on surrounding lands. Environmental Stewardship Division will implement this plan subject to appropriate funding levels available to complete the tasks.

The process for preparing a management plan involves a careful analysis of the overall goals of the protected area, use patterns, management objectives, and possible sources of conflict among protected area policies. Through the planning process, various options for managing the protected areas are assessed. In choosing the most appropriate option, the intent is to reach a balance between protecting natural values from damage and providing opportunities for human use in the protected area. The first step of preparing for the management planning process was the preparation of a Technical Background Information Summary. This report is available on the Internet at: http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/stikine_back.htm.

Public consultation is a cornerstone of the management planning process, and results in balanced and informed plans. This management plan for the Stikine Country Protected Areas System incorporated public input at several stages of the planning process. Initially, the public contributed their views on current issues, long-term direction and a vision for the protected areas through workshops and open houses at Dease Lake, Terrace, Smithers and Vancouver in March 2001. As part of this process the public completed a questionnaire providing their vision for protected areas management direction.

The next step in the planning process took the initial direction and proposed solutions to identified management issues. Environmental Stewardship Division incorporated these solutions into "Draft Management Direction" and took this document back to the public for their discussion and comment in another series of workshops and open houses held in Dease Lake, Terrace, Smithers and Vancouver in March 2002. The comments and discussion from those workshops and written submissions played a vital role in developing the first draft management plan for Stikine Country Protected Areas. The first draft was made available for public comment for a period of 3 months. Subsequently, a final draft was tabled with the public.

1.2 Background Summary

The Stikine Country Protected Areas Management Plan covers the large connected protected areas in the Stikine River area in northwestern British Columbia (Map 1). These protected areas include previously established Class A parks, former recreation areas, new Class A parks and *ELU Act* protected areas resulting from the Cassiar Iskut-Stikine Land and Resource

Management Plan (Table 1). This management plan replaces existing interim plans for some of Stikine Country Protected Areas.

Table 1. Status of Stikine Country Protected Areas.

Protected Area	Area (ha)	Date established	Most recent legal definition of boundary[1]	Legislation
Chukachida Protected Area	19,637	2001	2001	*Environment and Land Use Act*
Gladys Lake Ecological Reserve[2]	44,098	1975	2001	*Ecological Reserve Act, Protected Areas of British Columbia Act*
Mount Edziza Provincial Park	266,095	1972	2001	*Park Act, Protected Areas of British Columbia Act*
Mount Edziza Protected Area (proposed)	607			Not yet established
Pitman River Protected Area	16,316	2001	2001	*Environment and Land Use Act*
Stikine River Provincial Park[3]	257,177	2001	2001	*Park Act, Protected Areas of British Columbia Act*
Spatsizi Plateau Wilderness Provincial Park	695,102	1975	2003	*Park Act, Protected Areas of British Columbia Act*
Tatlatui Provincial Park	105,829	1973	2001	*Park Act, Protected Areas of British Columbia Act*

[1] All protected areas were under the *Park Act* and *Ecological Reserve Act* and more recently have been included in schedules in the *Protected Areas of British Columbia Act*

[2] Changes to the Gladys Lake Ecological Reserve boundary were inadvertlly made in 2001 when the boundary for Spatsizi Plateau Wilderness Park was expanded to add parkland as a result of the Cassiar Iskut Stikine LRMP. It is the intention of WLAP to seek a return to the pre 2001 boundary using current mapping standards.

[3] Much of Stikine River Provincial Park was originally established as the Stikine River Recreation Area in 1987 under the *Park Act*

When Spatsizi Plateau Wilderness Provincial Park was originally established, management direction included the following:

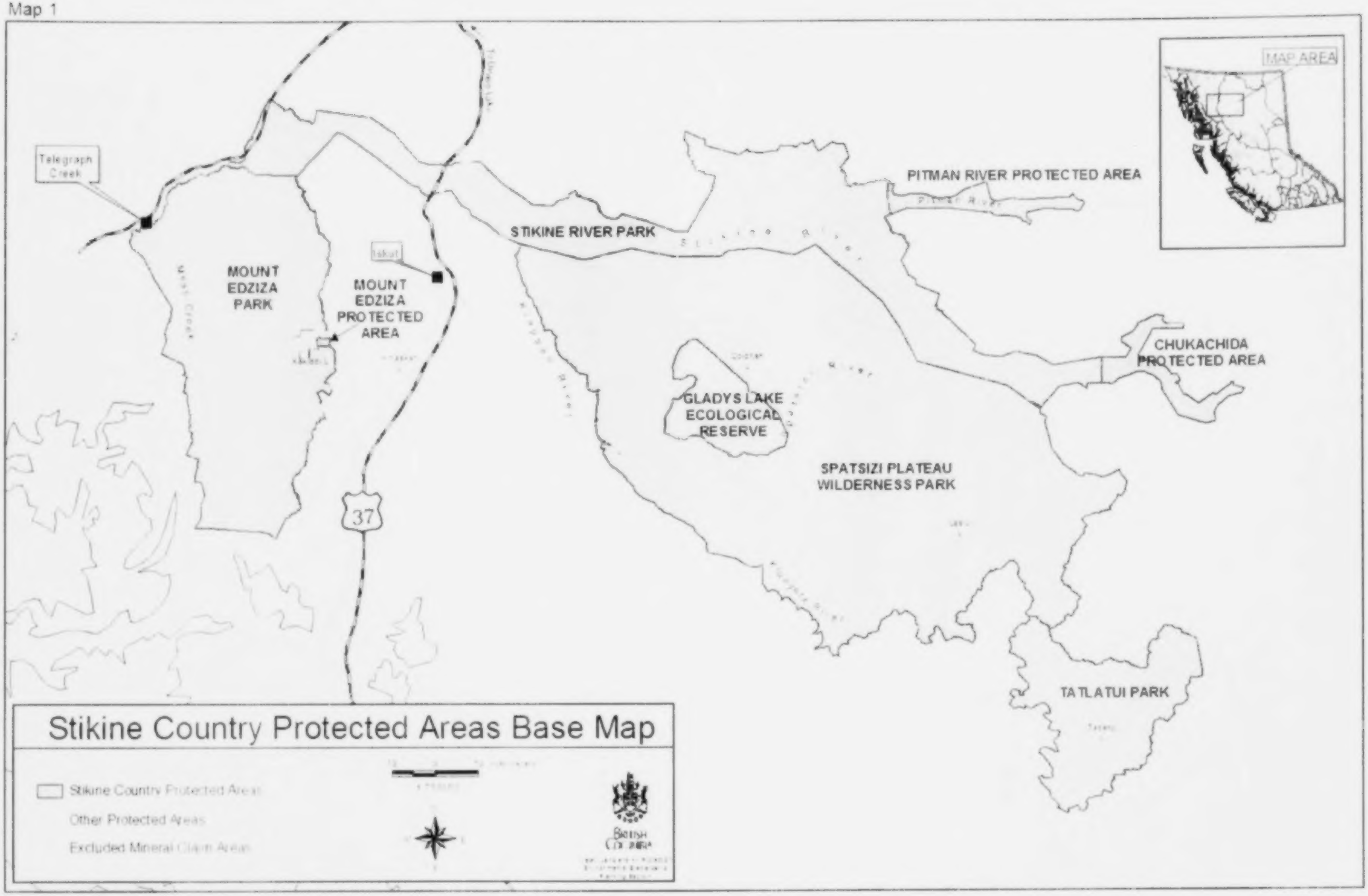
> *"The area will be maintained as a wilderness landscape in which natural communities are preserved intact and the progressions of the natural systems may proceed without alteration. Hunting and fishing, within sustained yield limits, is permissible. Recreational use of the area shall be limited to activities that do not detract from or disturb the wilderness experience sought by visitors. These uses include: fishing, hunting, hiking, climbing, camping, horse travel and nature study.*
>
> *While the use of aircraft for access shall be permitted in specific designated landing areas, subject to such conditions as may be established, otherwise the use of internal combustion engines for recreational purposes shall be prohibited. Any improvement or development will be limited to that which is required to protect the environment, to ensure the safety of the visitor, or to provide a minimal level of visitor service."*

In this document, Stikine Country Protected Areas refers to all Class A parks, ecological reserves and *ELU Act* protected areas. When the term "protected areas" is used in lower case letters (except in capitalized titles), it includes all types of protected areas including Class A parks, ecological reserves and *ELU Act* protected areas. Where individual *ELU Act* designated Protected Areas are referred to, "Protected Area" or "Protected Areas" is capitalized.

Map 1. Stikine Country Regional Context Map.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/approved/map01_context.pdf

Map 1


Stikine Country Protected Areas Base Map
Stikine Country Protected Areas
Other Protected Areas
Excluded Mineral Claim Areas
MAP AREA
Telegraph Creek
Iskut
MOUNT EDZIZA PARK
MOUNT EDZIZA PROTECTED AREA
STIKINE RIVER PARK
Stikine River
PITMAN RIVER PROTECTED AREA
Pitman River
CHUKACHIDA PROTECTED AREA
GLADYS LAKE ECOLOGICAL RESERVE
SPATSIZI PLATEAU WILDERNESS PARK
TATLATUI PARK
37
Mess Creek
British Columbia

1.3 Relationship to Other Land Use Planning

The Cassiar Iskut-Stikine Land and Resource Management Plan (LRMP) provides management direction for new protected areas resulting from the Cassiar Iskut-Stikine LRMP process and for Stikine River Provincial Park, which was upgraded from recreation area to Class A park status. Management direction from the LRMP includes both general direction and specific direction for each new protected area in the LRMP area (Appendix 1).

New protected areas and additions to existing protected areas subject to recommendations from the Cassiar Iskut-Stikine LRMP include the Klastline addition to Mount Edziza Provincial Park, the Mess Creek addition to Mount Edziza Provincial Park, Stikine River Provincial Park, Pitman River Protected Area, Chukachida Protected Area, and, the Metsantan addition to Spatsizi Plateau Wilderness Provincial Park (Map 2).

Special provisions for those protected areas and protected area additions can be found in Appendix 1. *ELU Act* protected area status was recommended for Pitman River Protected Area and Chukachida Protected Area to allow for potential road access for mining purposes if required. Class A park status was recommended for all other proposed protected areas and additions.

The Cassiar Iskut-Stikine LRMP also directed that a portion of Mount Edziza Provincial Park be converted to *ELU Act* protected area status to provide land access to mineral claims in the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) if required. If a road corridor is established, the balance of the protected area will be returned to Class A park status.

The Cassiar Iskut-Stikine LRMP also provides direction regarding two areas with high mineral potential that were recommended for eventual protected area status. The Mount Edziza Resource Management Zone covers the former Mount Edziza Recreation Area and includes the Spectrum property, a gold-copper prospect (Appendix 2). The Metsantan Resource Management Zone includes an area recommended for protection but covered by mineral tenures near Metsantan Lake (Appendix 1). The intent is for those areas to eventually become part of Mount Edziza Provincial Park and Spatsizi Plateau Wilderness Provincial Park, respectively, at the end of 20 years following approval of the Cassiar Iskut-Stikine LRMP if mineral tenures have lapsed, or once mineral tenures lapse following 20 years.

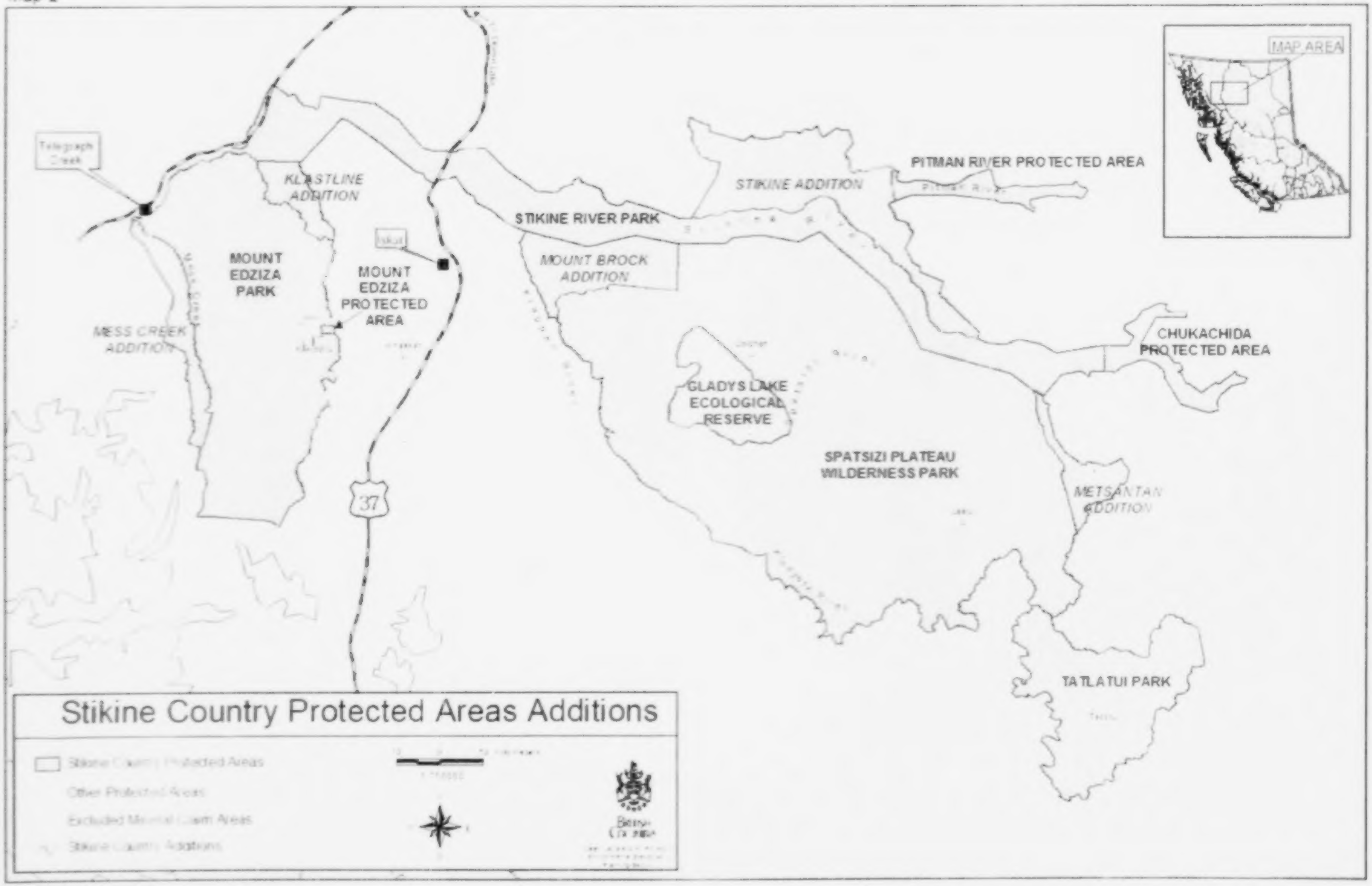
Although the Cassiar Iskut-Stikine area currently contains relatively little industrial development, the Cassiar Iskut-Stikine LRMP sets direction for future industrial development within the LRMP area. Potential new access roads may be developed that will affect access to and use of protected areas in the region. The Cassiar Iskut-Stikine LRMP gives management direction regarding some of these roads.

Management direction statements (MDS) have been prepared separately for other protected areas in the Cassiar Region that are not included in the Stikine Country Protected Areas Management Plan.

Map 2. Stikine Country Protected Areas Additions.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/approved/map02_addition.pdf

Map 2



Stikine Country Protected Areas Additions

MAP AREA
Telegraph Creek
KLASTLINE ADDITION
MOUNT EDZIZA PARK
MOUNT EDZIZA PROTECTED AREA
Iskut
MESS CREEK ADDITION
37
STIKINE RIVER PARK
MOUNT BROCK ADDITION
STIKINE ADDITION
PITMAN RIVER PROTECTED AREA
GLADYS LAKE ECOLOGICAL RESERVE
SPATSIZI PLATEAU WILDERNESS PARK
CHUKACHIDA PROTECTED AREA
METSANTAN ADDITION
TATLATUI PARK
Stikine Country Protected Areas
Other Protected Areas
Excluded Mineral Claim Areas
Stikine Country Additions
British Columbia

1.4 Management Issues

Many management issues arise in a system of protected areas as large and diverse as the Stikine Country Protected Areas System. Table 2 presents the issues in broad terms to include a wide range of possible management direction.

Table 2. Management issues in Stikine Country Protected Areas.

Theme	Issue
Protecting ecological values	• Management of the large predator-prey systems focused on Mount Edziza Provincial Park and Spatsizi Plateau Wilderness Provincial Park is hampered by insufficient knowledge and understanding of how these predator-prey systems function. • Protection of natural values, such as plants and plant communities at risk, fish and wildlife, is constrained in many areas because of lack of research and inventory information. • Outdoor recreation activities could impact wildlife, fish and vegetation if not managed appropriately; however impacts are not well documented because of a lack of evaluation and monitoring baseline data. • Helicopter and floatplane access could result in unacceptable impacts on fish and wildlife populations and wilderness values if not managed properly. • Developments on adjacent land could result in unacceptable impacts on protected area values if not managed properly. • Disturbance processes (e.g. fire, mountain pine beetles) are often managed to protect current ecosystem structure (e.g. mature forests, grasslands) rather than ecosystem function (e.g. succession, regeneration) even though they are vital to maintaining natural ecosystem functioning. • The use of exotic animals as pack animals may put wildlife species in danger through the introduction of diseases to endemic species. • The use of exotic plant species as feed for pack animals could harm native plant communities through the introduction of exotic plants. • Water quality near heavily used areas and major land use developments could decline if waste is not managed appropriately.
Protecting recreation values	• Wilderness outdoor recreation values in some areas may be compromised by uses and developments that are not compatible with a wilderness setting. • Commercial recreation activities and infrastructure could affect the outdoor recreation experience of public users if not managed properly. • The wilderness character of the protected areas may be impacted if motorized activities are not managed properly. • Conflicts between motorized and non-motorized river users could occur if not managed appropriately. • Outdoor recreation use could exceed levels appropriate to protect ecological and wilderness values if acceptable levels are not determined and implemented.
Protecting geological values	• Recreational or industrial activities on or near sensitive geological features, such as cinder cones, hot springs and columnar basalt formations, may result in unacceptable impacts on those features.
Managing access levels	• Unacceptable impacts may occur to natural, cultural and wilderness values if human access is not managed appropriately.
Protecting cultural values	• Protection of fragile and vulnerable cultural heritage sites, such as obsidian quarry and village sites, may be ineffective because the remoteness of these features makes enforcement difficult. • Protection of cultural heritage values is hampered because of insufficient research and inventory. • Cultural heritage sites (e.g. former First Nation village sites) may deteriorate because of insufficient active monitoring and on-site management.
First Nations involvement	• First Nations and local communities feel they should be more actively involved in protected area management.
Public safety	• The potential for negative human/wildlife interactions along existing trails and river routes is unknown because of insufficient information.
Providing public information	• The provision of information to the public and user groups may be difficult because of the remoteness of many of the access points.

2 The Role of the Protected Areas

2.1 Provincial and Regional Context

Stikine Country Protected Areas consists of over 1.4 million hectares of contiguous protected areas in northwestern British Columbia. This large block of connected protected areas is nationally significant because it protects large mammal predator/prey systems and conserves a relatively natural vegetation mosaic where large-scale disturbances such as fire have been relatively unaltered by humans. Rugged mountains, high elevation alpine plateaus, and low elevation forested valleys and plateaus characterize the landscape. The climate is predominantly continental with cold winters and relatively cool, short summers.

All of the Stikine Country Protected Areas lie within the Cassiar Iskut-Stikine LRMP area except Tatlatui Provincial Park, which lies within the Mackenzie LRMP area. The protected areas covered by the Stikine Country Protected Areas Management Plan make up the majority of the protected areas in the Cassiar Iskut-Stikine planning area. However, several smaller protected areas protect other nationally, provincially and regionally significant geological, vegetation and wildlife features or offer significant frontcountry and backcountry outdoor recreation and camping opportunities. These smaller protected areas include areas such as:

- Tuya Mountains Provincial Park, 100 kilometres to the northwest, which protects a rare tuya formation;
- Craig Headwaters Protected Area, 80 kilometres to the southwest, which protects a low elevation coastal ecosystem with high quality fisheries and grizzly habitat values;
- Lava Forks Provincial Park, 85 kilometres to the southwest, which protects the most recent lava flow in Canada;
- Ningunsaw Provincial Park and Ningunsaw River Ecological Reserve, 46 kilometres to the south, which protect a valley bottom to alpine ecosystem with high quality grizzly bear year round habitat and significant moose summer habitat;
- Todagin South Slope Provincial Park, near Iskut, which protects very high value Stone's sheep winter range and lambing habitat;
- Kinaskan Lake Provincial Park, 36 kilometres south of Iskut, which provides provincially significant frontcountry camping, boating and fishing outdoor recreation opportunities; and,
- Boya Lake Provincial Park, 150 kilometers north of Dease Lake, which protects a superb glacial moraine esker and kettle landscape and excellent frontcountry camping, boating and wildlife viewing outdoor recreation opportunities.

Three large protected areas exist east of Stikine Country Protected Areas. Finlay-Russel Park and Protected Area (122 771 hectares) lies adjacent at the eastern boundary of Chukachida Protected Area. About 30 kilometres northeast of Pitman River Protected Area are the Denetiah Park (90 379 hectares) and Denetiah Corridor Protected Area (7 441 hectares), and Dune Za Keyih Park and Protected Area (Frog-Gataga, 346 833 hectares). All three of those *ELU Act* protected areas contain provisions for potential new road corridors and are part of the Muskwa-Kechika Management Area.

Currently, 73% of the Cassiar Iskut-Stikine Planning Area is in a wilderness or semi-wilderness state. The main roads include Highway 37, which runs north-south and crosses the Stikine River in Stikine River Provincial Park and the Telegraph Creek Road, which runs east-west between Dease Lake and Telegraph Creek. Other less developed roads, including the BC Rail (BCR) railroad grade and the Willow Creek Road, provide limited access to some of the protected areas.

The Cassiar Iskut-Stikine Region is relatively isolated and sparsely populated with the total population estimated at 1230 in 1996; the total includes people of aboriginal descent, who account for 62% of the population. Three main communities are located within the region: Dease Lake is located on Highway 37, 40 kilometres north of Stikine River Provincial Park; Iskut is located on Highway 37, 40 kilometres south of Stikine River Provincial Park; and Telegraph Creek is located 115 kilometres southwest of Dease Lake on the Telegraph Creek Road. These communities offer basic amenities such as food services, accommodation, a general store, a gas station and some flight services; Dease Lake is the main service centre for the region. The local people are active users of the Stikine Country Protected Areas and are interested in commercial opportunities within the protected areas system. The three communities are the main staging areas for visitors accessing Stikine Country Protected Areas.

2.2 Significance in the Protected Area System

The Stikine Country Protected Areas System is one of five major concentrations of adjoining protected areas in British Columbia that presents internationally significant wild landscapes in relatively undisturbed natural conditions. Only the Muskwa-Kechika Management Area, the Tweedsmuir Provincial Park – Kitlope Heritage Conservancy Protected Area - Entiako Provincial Park and Protected Area – Fiordland Recreation Area protected areas centre, Tatshenshini – Alsek Provincial Park and the Wells Gray – Cariboo Mountains – Bowron Lake nucleus rival the Stikine Country for the conservation of vast ecosystems and landscapes.

Stikine Country Protected Areas is second only to the Tweedsmuir Provincial Park – Kitlope Heritage Conservancy Protected Area – Entiako Provincial Park and Protected Area – Fiordland Recreation Area protected areas centre in conserving the largest system of adjoining protected areas in British Columbia. Indeed, Stikine Country Protected Areas is the chief system in the province containing diverse large mammal predator-prey systems that include caribou (*Rangifer tarandus*), Stone's sheep (*Ovis dalli stonei*), mountain goat (*Oreamnos americanus*), moose (*Alces alces*), grizzly bear (*Ursus arctos*), black bear (*Ursus americanus*) and wolf (*Canis lupus*). The protected areas contribute significantly to the protection of large mammal predator-prey systems in British Columbia. To the east, the protected areas in the Muskwa-Kechika Management Area also conserve a large area for large mammal predator-prey systems but many of those protected areas are not connected. As well, Stikine Country Protected Areas is the largest system of adjoining protected areas in the province where humans (e.g. fire suppression) have not significantly altered the large-scale natural disturbance regime; the current vegetation landscape is mainly the result of natural processes.

Stikine Country Protected Areas represent mountains, alpine plateaus and northern boreal forests within the Southern Boreal Plateau and Stikine Plateau ecosections including the following biogeoclimatic zones and subzones: Alpine Tundra (AT): Boreal White and Black Spruce (BWBSdk1); Engelmann Spruce- Subalpine Fir (ESSFwv), Spruce-Willow-Birch (SWB) and Sub-Boreal Spruce (SBS). The Cassiar Ranges, Tahltan Highland, Northern Skeena Mountains and Eastern Skeena Mountains ecosections are also represented but to a lesser extent.

Stikine Country Protected Areas fulfil both the Protected Areas Strategy goals of ecosystem representation and special features. Stikine Country Protected Areas occur within six of the province's 100 land-based ecosections (Appendix 3). Over 1.2 million hectares or 88% of Stikine Country Protected Areas land base lie within the Southern Boreal Plateau Ecosection, including all of Spatsizi Plateau Wilderness Provincial Park and Gladys Lake Ecological Reserve and most of Tatlatui Provincial Park, Mount Edziza Provincial Park and Stikine River Provincial Park east of Highway 37. With 69% of the ecosection within protected areas, all four biogeoclimatic subzones found within this ecosection (ESSFwv, BWBSdk1, SWB, AT) are well represented (see Appendix 3 for biogeoclimatic zone and subzone descriptions).

Another 8% of Stikine Country Protected Areas lie within the Stikine Plateau Ecosection. That ecosection includes Stikine River Provincial Park east of Highway 37 and the northern portion of Mount Edziza Provincial Park, with primarily the BWBSdk1 biogeoclimatic subzone represented. Chukachida Protected Area and portions of Pitman River Protected Area and Stikine River Provincial Park, which make up 2.5% of Stikine Country Protected Areas, lie within the Cassiar Ranges Ecosection. The protected areas in this ecosection protect mostly valley bottoms within the SWB and BWBSdk1 biogeoclimatic subzones. Less than 2% of Stikine Country Protected Areas lie within the other three ecosections (Tahltan Highland, Northern Skeena Mountains, and Eastern Skeena Mountains).

Stikine Country Protected Areas contain many animal and plant species and plant communities at risk including 27 plant species, 11 plant communities, and 15 animal species (bull trout (*Salvalinus confluentus*), caribou, grizzly bear, wolverine (*Gulo gulo*), and fisher (*Martes pennanti*); and 11 bird species.

Stikine Country Protected Areas include the following special features.

- Stikine River Provincial Park contains the entire Stikine River Canyon and a major portion of one of the largest free-flowing rivers in British Columbia. People recognize the Stikine River as an internationally significant natural feature with canyon, volcanic and internal structural rock exposure features. The park also contains important low elevation forested caribou winter range for the Spatsizi caribou population and rare dry steppe plant communities.
- Mount Edziza Provincial Park contains distinctive nationally significant volcanic features including Mount Edziza Peak and associated cinder cones (e.g. Eve Cone, Coffee Crater, Cocoa Crater), the Spectrum Range, obsidian deposits that were quarried and traded by the local First Nations, and hot springs and associated special plant communities.
- Gladys Lake Ecological Reserve is the largest ecological reserve in British Columbia and is the only one large enough to protect a range of habitat features for a diverse large mammal predator-prey system that includes caribou, Stone's sheep, mountain goat, moose, grizzly bear, black bear and wolf.
- Spatsizi Plateau Wilderness Provincial Park, Stikine River Provincial Park, Pitman River Protected Area and Chukachida Protected Area combined provide the only fully protected region in British Columbia enclosing contiguous streams, large rivers and lakes believed to support the blue-listed bull trout in the full diversity of its life histories.
- Pitman River Protected Area and Chukachida Protected Area contain important low elevation forested and wetland habitat for moose, and wildlife migration corridors to the east.

- The area covered by Stikine Country Protected Areas has great cultural significance to First Nations, containing many cultural heritage sites such as Metsantan and Caribou Hide village sites in Spatsizi Plateau Wilderness Provincial Park.
- The Klastline addition to Mount Edziza Provincial Park contains important mule deer (*Odocoileus hemionus*) habitat for a small isolated population of mule deer.

Stikine Country Protected Areas conserve outstanding wilderness values and present important outdoor recreation and tourism opportunities. The presence of the Stikine River and its large tributaries places the Stikine Country Protected Areas System in a special position concerning the international scope of its opportunities. For example, visitors to Stikine Country Protected Areas may participate in river rafting, motorboating, canoeing, kayaking, angling and wildlife viewing experiences. Only the Muskwa-Kechika protected areas offer the wildlife viewing and hunting opportunities found in the Stikine Country Protected Areas. Similarly, visitors can find opportunities to wilderness trek, backpack, mountain climb, tour with professional guides, snowshoe and ski tour. Complementing the wilderness and backcountry outdoor recreation activities are the existing and potential frontcountry outdoor recreation activities and facilities found within Stikine River and Kinaskan Lake provincial parks and the Highway 37 corridor.

Figure 1. Grand Canyon of the Stikine River, Stikine River Provincial Park

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal.htm

2.3 Protected Area Roles

2.3.1 Conservation

The primary conservation role that all Stikine Country Protected Areas fulfill is to protect a representative example of a naturally functioning ecosystem that includes large-scale disturbances such as fire, and a viable, diverse, large mammal predator-prey system, consisting of caribou, Stone's sheep, mountain goat, moose, grizzly bear, black bear, and wolf, and to protect special geologic features and animal and plant species and plant communities at risk. Special geologic features include the Grand Canyon of the Stikine River, the Mount Edziza composite shield volcano and associated post-glacial cinder cones, thermal springs phenomena and associated rare plant communities. Special aquatic features include the only fully protected area in British Columbia enclosing contiguous streams, large rivers and lakes believed to support the blue-listed bull trout in the full diversity of its life histories (Spatsizi Plateau Wilderness Provincial Park, Stikine River Provincial Park, Pitman River Protected Area and Chukachida Protected Area combined), and rainbow trout only fish systems in all of Tatlatui Provincial Park and in the Kakiddi Lakes chain in Mount Edziza Provincial Park.

The Stikine Country Protected Areas System represents mountains, alpine plateaus and northern boreal forests within the Southern Boreal Plateau and Stikine Plateau ecosections including the following biogeoclimatic zones and subzones: Alpine Tundra (AT): Boreal White and Black Spruce (BWBSdk1); Engelmann Spruce- Subalpine Fir (ESSFwv); Spruce-Willow-Birch (SWB) and Sub-Boreal Spruce (SBS). The Cassiar Ranges, Tahltan Highland, Northern Skeena Mountains and Eastern Skeena Mountains ecosections are also represented but to a lesser extent.

Each protected area contains specific conservation roles.

- Mount Edziza Provincial Park and the proposed Mount Edziza Protected Area's conservation role is to protect and preserve internationally significant special geologic features including the Mount Edziza composite shield volcano, the post-glacial cinder cones, thermal springs phenomena (including plant species and plant communities at risk), brilliant coloured lava strata, blocky and columnar basalt formations, canyon formations and rare sediments.
- Stikine River Provincial Park's conservation role is to conserve the special geologic features contained in the Grand Canyon of the Stikine River; plant species and plant communities at risk; and the river environment with its special aquatic features including fish, wildlife and vegetation.
- Spatsizi Plateau Wilderness Provincial Park's conservation role is to protect internationally significant wild land mountain and plateau landscapes, large mammal populations, superb river, lake and small waterbody environments and intact vegetation communities.
- Gladys Lake Ecological Reserve's primary conservation role is to conserve an intact, undisturbed wilderness environment for Stone's sheep, mountain goat, caribou and grizzly bear. The ecological reserve also acts as a special benchmark for scientific research and education purposes.
- Tatlatui Provincial Park's conservation role is to conserve an intact, relatively undisturbed wilderness mountain environment and to protect large mammal populations; river, lake and small waterbody environments; and intact vegetation communities.

- Chukachida Protected Area's and Pitman River Protected Area's conservation role is to protect important low elevation forested and wetland habitat for moose, and wildlife migration corridors.

2.3.2 Cultural Heritage

Stikine Country Protected Areas' cultural heritage role is to protect known aboriginal and non-aboriginal cultural heritage sites including sites such as Caribou Hide, Metsantan, Cold Fish Lake, obsidian quarry sites, portions of the Dominion Telegraph Trail and the Tahltan Eagle.

The cultural heritage role of each protected area is as follows.

- Mount Edziza Provincial Park's cultural heritage role is to protect and preserve provincially significant Tahltan Nation obsidian quarry and archaeological sites, First Nations legend sites; the Tahltan Eagle; and portions of the Dominion Telegraph Trail.
- Spatsizi Plateau Wilderness Provincial Park's cultural heritage role is to protect and conserve provincially significant First Nations village sites at Caribou Hide and Metsantan; First Nations archaeological and legend sites; non-aboriginal fur-trade sites; traditional trails; historic trails; and famous landmarks such as Cold Fish Lake cabins.
- Stikine River Provincial Park, Pitman River Protected Area and Chukachida Protected Area's cultural heritage role is to protect and conserve First Nations village, archaeological and legend sites; pre and post-contact historic routes and trails; and sites associated with pioneer, fur trade and guide-outfitting sites.
- Tatlatui Provincial Park's cultural heritage role is to protect and conserve First Nations archaeological and legend sites, historic trails, and sites associated with pioneer and guide-outfitting historic sites.

2.3.3 Tourism and Outdoor Recreation

The Stikine Country Protected Areas' tourism and outdoor recreation role focuses on providing backcountry recreation experiences in a vast, mostly unroaded wilderness region containing mountains, alpine plateaus, low elevation boreal forests and navigable rivers, where signs of human activity are few. Few places in British Columbia and Canada rival the diversity of landscapes, intact wild land ecosystems, large and small mammal wildlife populations, non-consumptive and consumptive outdoor recreation opportunities and special cultural heritage values that exists in this region. Significant outdoor recreation wilderness experiences include the Spatsizi River and Stikine River wilderness canoe and rafting routes, multi-day backpacking and horseback riding trips along historic trails, and wilderness-based hunting and angling. Other outdoor recreation opportunities offered in this wilderness setting include ski touring, kayaking, dog sledding and snowshoeing, with jet boats acceptable as a method of transportation in Stikine River Provincial Park, Pitman River Protected Area, Chukachida Protected Area, and portions of Spatsizi Plateau Wilderness Provincial Park. The lack of road access to most areas means people gain access to outdoor recreation opportunities primarily by using floatplanes and motorboats. Vehicle access outdoor recreation opportunities exist at the Highway 37 Bridge crossing in Stikine River Provincial Park and at trailheads to the Grand Canyon of the Stikine River.

Specific outdoor recreation and tourism roles for each protected area are as follows.

- Spatsizi Plateau Wilderness Provincial Park's outdoor recreation and tourism role is to present internationally significant backcountry recreation opportunities in a vast plateau, mountain and river valley wild land setting. The park contains publicly used trails, cabins and non-permanent outdoor recreation facilities complemented by private sector guide-outfitting services and facilities. The park offers hunting and fishing opportunities as well as non-consumptive outdoor recreation opportunities including photography, river rafting, canoeing, kayaking, trekking, cross-country ski touring, wildlife viewing and nature and human history appreciation.

- Mount Edziza Provincial Park provides backcountry recreation opportunities ranging from backpacking in volcanic alpine tundra to camping in wilderness forest, lake and river environments. The park also offers hunting and fishing and wildlife viewing outdoor recreation opportunities.
- Stikine River Provincial Park's outdoor recreation and tourism role is to present frontcountry recreation opportunities in a river valley setting, and, together with Pitman River Protected Area and Chukachida Protected Area, internationally significant backcountry recreation opportunities in a river valley, mountain and canyon wild land setting, with limited facilities. The three backcountry protected areas offer hunting and fishing opportunities as well as non-consumptive outdoor recreation opportunities including dispersed camping, photography, river rafting, canoeing, kayaking, trekking, cross-country ski touring, wildlife viewing and nature and human history appreciation. Stikine River Provincial Park also offers frontcountry day use opportunities.
- Tatlatui Provincial Park's outdoor recreation and tourism role is to present and protect provincially significant backcountry recreation opportunities in a mountain, river, lake and alpine tundra setting. The park contains limited outdoor recreation facilities and wilderness-oriented private sector guide-outfitting services and facilities and offers hunting and fishing opportunities, as well as non-consumptive outdoor recreation opportunities including photography, canoeing, trekking, cross-country ski touring, wildlife viewing and nature appreciation.

2.3.4 Education and Research

All Stikine Country Protected Areas play an important education and research role within the British Columbia Protected Areas System.

For all Stikine Country Protected Areas, the research role is to present a protected boreal landscape relatively free of human disturbance as a benchmark, where natural ecosystem processes continue with minimal intervention; and to provide a diversity of mountain, plateau and river valley landscapes for the study of large mammal populations, predator-prey systems, freshwater aquatic systems, plant and animal species and plant communities at risk, and geologic features (e.g. volcanic features in Mount Edziza Provincial Park) and the effects of non-industrial human use on these environments and plant and animal species. Gladys Lake Ecological Reserve performs an especially significant research role by presenting a protected landscape that allows natural ecological processes to unfold; providing a benchmark to measure the effects of human use that occurs in other areas; and conserving rare and threatened plant and animal species for scientific research and medicinal applications.

The education role of Stikine Country Protected Areas is to provide an outdoor classroom environment for studying terrestrial and aquatic boreal ecosystems and geological features. The protected areas system also provides opportunities for First Nations to share information on culture, origin stories, place names, sustenance practices, values and beliefs.

3 Vision for the Stikine Country Protected Areas System

3.1 What is a Vision Statement

A vision statement establishes what we, as a society want to see for a protected area over decades and even centuries (i.e. a description of its future state). Clearly defining the long-term vision helps to guide short-term management direction. The vision statement is an important guide when reacting to changing demands for outdoor recreation or when incorporating new approaches to conservation or cultural heritage management.

3.2 Vision Statement

Stikine Country Protected Areas are one of the most remarkable and special group of wilderness areas on earth where nature prevails and people who enter find the spectacular surroundings and naturally functioning ecosystems to be a continuous gift, a treasure to carry with them forever. Conservation of natural and cultural heritage values is the management priority of the Stikine Country Protected Areas System.

Ecosystems, comprised of the natural diversity of plants, animals and processes that support them, evolve within a natural range of variability. Intact large mammal predator/prey systems centred in Spatsizi Plateau Wilderness and Mount Edziza provincial parks embody the significance of this wilderness area in a global context.

Cultural heritage features continue to exist in a natural setting with some features restored for traditional, historic or interpretive purposes.

The landscapes, as they have in the past for First Nations, support cultural, spiritual, recreational and economic activities for all British Columbians in harmony with wilderness values.

The Stikine Country Protected Areas represent part of the heartland of the Tahltan people and one aspect of their cultural and spiritual lives.

First Nations exercise their aboriginal and treaty rights. First Nations have a strong sense of reconnection to and stewardship of their traditional territories within protected areas and carry out traditional uses and cultural programs for the benefit of First Nation communities. Traditional use sites and trails and archaeological sites are well documented and protected from adverse impacts.

Visitors to Stikine Country Protected Areas are respectful of the natural and cultural heritage values and experience internationally significant wilderness recreation and wilderness tourism opportunities. Outdoor recreation opportunities are primarily wilderness-based but include a range of opportunities from limited serviced frontcountry camping to low impact activities in wilderness areas where solitude and quiet prevail.

Management of Stikine Country Protected Areas fully involves First Nations, local communities and other British Columbians. The current Tahltan/Environmental Stewardship Division committee has evolved into a strong partnership where Tahltan interests and pursuits are clearly recognized and accommodated.

First Nations and local communities are key beneficiaries of employment and economic opportunities provided by the protected areas. These local groups actively participate in balancing economic benefits with the need to maintain ecological and cultural heritage integrity for the long term. Dease Lake, Telegraph Creek and Iskut serve as gateway communities for regional, national and international visitors.

Ongoing information and education programs maintain a high level of public understanding and support for the protected areas, including a visitor centre located in one of the communities along Highway 37.

The Stikine Country Protected Areas System provides world class opportunities to learn and appreciate First Nations cultures.

Activities, facilities, use levels and access are carefully managed to ensure that ecosystems and cultural heritage values remain intact and exceptional wilderness visitor experiences are maintained.

Management of Stikine Country Protected Areas is supported by comprehensive inventory and research and relies on both First Nations traditional knowledge and timely scientific projects.

Managers are proactive in responding to potential adverse impacts and pressures on the protected areas system and use adaptive management and precautionary principles.

Management of Stikine Country Protected Areas respects and is coordinated with management regimes outside the system. Coordination focuses on adjacent areas that provide wildlife habitats for populations resident in the protected areas system, landscape connectivity and access.

4 Managing Stikine Country Protected Areas and their Ecosystems

4.1 Managing the System of Protected Areas

Individually, Stikine Country Protected Areas contain special wildlife, vegetation, geologic, cultural and outdoor recreation values. As a system, they protect a broad range of values and provide an exceptional opportunity to manage large-scale ecosystem dynamics in a relatively natural setting. For example, a large fire may affect a large portion of Pitman River Protected Area but will have a much smaller effect on the entire group of Stikine Country Protected Areas.

Figure 2. Cold Fish Lake, Spatsizi Plateau Wilderness Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal.htm

Conservation of natural and cultural values is the management priority in Stikine Country Protected Areas. As a system, Stikine Country Protected Areas focus on protecting natural and cultural heritage values while offering a range of outdoor recreation opportunities where they do not conflict with protection of natural or cultural values. This allows Environmental Stewardship Division to meet both components of its protected areas' mandate – conservation and recreation – within the Stikine Country Protected Areas System, rather than just within each protected area individually.

Management of Stikine Country Protected Areas will also be based on the precautionary principle, adaptive management, and both scientific and traditional knowledge.

Implicit in the precautionary principle is that all parties with an interest in managing the land base (i.e. government agencies, First Nations, commercial operators, stakeholders, NGOs [non-governmental organizations] and the public) have a responsibility to take precautionary measures to anticipate, prevent or minimize damage to the environment. Where uncertainty exists regarding the effect of management actions, protecting the resource should be the primary consideration. Lack of scientific certainty on impacts should not be used as a reason for not taking action to protect the environment.

In adaptive management, management policies and strategies are implemented and evaluated with a high degree of emphasis on learning about the response of the system to management. Adaptive management is simply "learning by doing" (Walters and Holling 1990). Nyberg (1998) proposed the following working definition for adaptive management:

"*Adaptive management is the systematic process for continually improving management policies and practices by learning from the outcomes of an operational program. Its most effective form – "active" adaptive management – employs management programs that are designed to experimentally compare selected policies or practices, by evaluating alternative hypotheses about the system being managed. The key characteristics of adaptive management include:*

- *Acknowledgement of uncertainty about what policy or practice is "best" for the particular management issue;*
- *Thoughtful selection of the policies or practices to be applied;*
- *Careful implementation of a plan of action designed to reveal the critical knowledge;*
- *Monitoring of key response indicators;*
- *Analysis of the outcome in consideration of the original objectives; and*
- *Incorporation of the results into future decisions.*"

Although some baseline information is currently available on the structure and function of natural and cultural features in Stikine Country Protected Areas, management direction and strategies in this plan are often based on a limited understanding of their impacts, especially long-term impacts. Throughout this management plan, the precautionary principle is applied when risks to natural and cultural values are high and impacts from management strategies may take a long time to determine. Adaptive management is applied when risks are lower and effects can be assessed in a shorter time (i.e. a few years).

The following definition of traditional knowledge has been adapted from "A Protocol Agreement between the Kaska Nation and The British Columbia and Yukon Chapters of the Canadian Parks and Wilderness Society" as referenced in the Draft Tahltan Land Stewardship Plan for the Tahltan (Stikine) Country Protected Areas (see Section 5.2). Traditional knowledge means a cumulative body of knowledge, practice, and beliefs transforming by adaptive processes and handed down through generations by traditional, educational and cultural transmission. Traditional knowledge is about the relationship of human beings with one another and their environment including songs, stories, designs, dances, language, ceremonies and ways of doing things that reflect First Nations heritage, history, culture, ethics, creativity, spirituality and sovereignty of First Nations People in their traditional territory.

4.1.1 General Management Direction

Overall Direction

Combined, Stikine Country Protected Areas offer a wide range of natural, cultural and outdoor recreation features representative of northern boreal landscapes. Environmental Stewardship Division will manage Stikine Country Protected Areas as a system of protected areas rather than as individual protected areas. Environmental Stewardship Division will apply its protected areas' conservation and recreation mandates to the system as a whole, with conservation of natural and cultural values as the management priority; outdoor recreation activities will be provided where they do not conflict with natural and cultural values. Management of the Stikine Country Protected Areas will be based on both scientific and traditional knowledge. The precautionary principle will be applied when scientific information is lacking, risks to natural and cultural values are high and impacts may take a long time to assess. Adaptive management will be applied when scientific information is lacking, risks to natural and cultural values are lower and impacts may be assessed over a shorter time period.

Objectives and Strategies

To conserve natural and cultural heritage values in Stikine Country Protected Areas while allowing appropriate outdoor recreation activities to occur.

- Identify and map important natural and cultural heritage values and develop strategies to conserve those values.
- Identify appropriate outdoor recreation activities and focus those activities in areas where they are compatible with natural and cultural heritage values.

To apply the precautionary principle and adaptive management where appropriate.

4.2 Managing Ecosystems within Stikine Country Protected Areas

An ecosystem can be defined as all living and non-living components of an environment and the processes that link them in time and space. Because ecosystems include the processes that link ecosystem components, they are inherently dynamic; ecosystem structure will change as processes act on them. Although this concept does not define the size of an ecosystem, it is important to include a spatial scale for management purposes. Ecosystems may be small or large depending on the limits used to define them; small or local scale ecosystems (e.g. a wetland complex) may be components of larger or regional scale ecosystems (e.g. a caribou herd's annual range). Since many ecosystem components and processes (e.g. wildlife, fire, forest insects) do not recognize administrative units such as protected areas, regional-scale ecosystems usually extend beyond protected area boundaries.

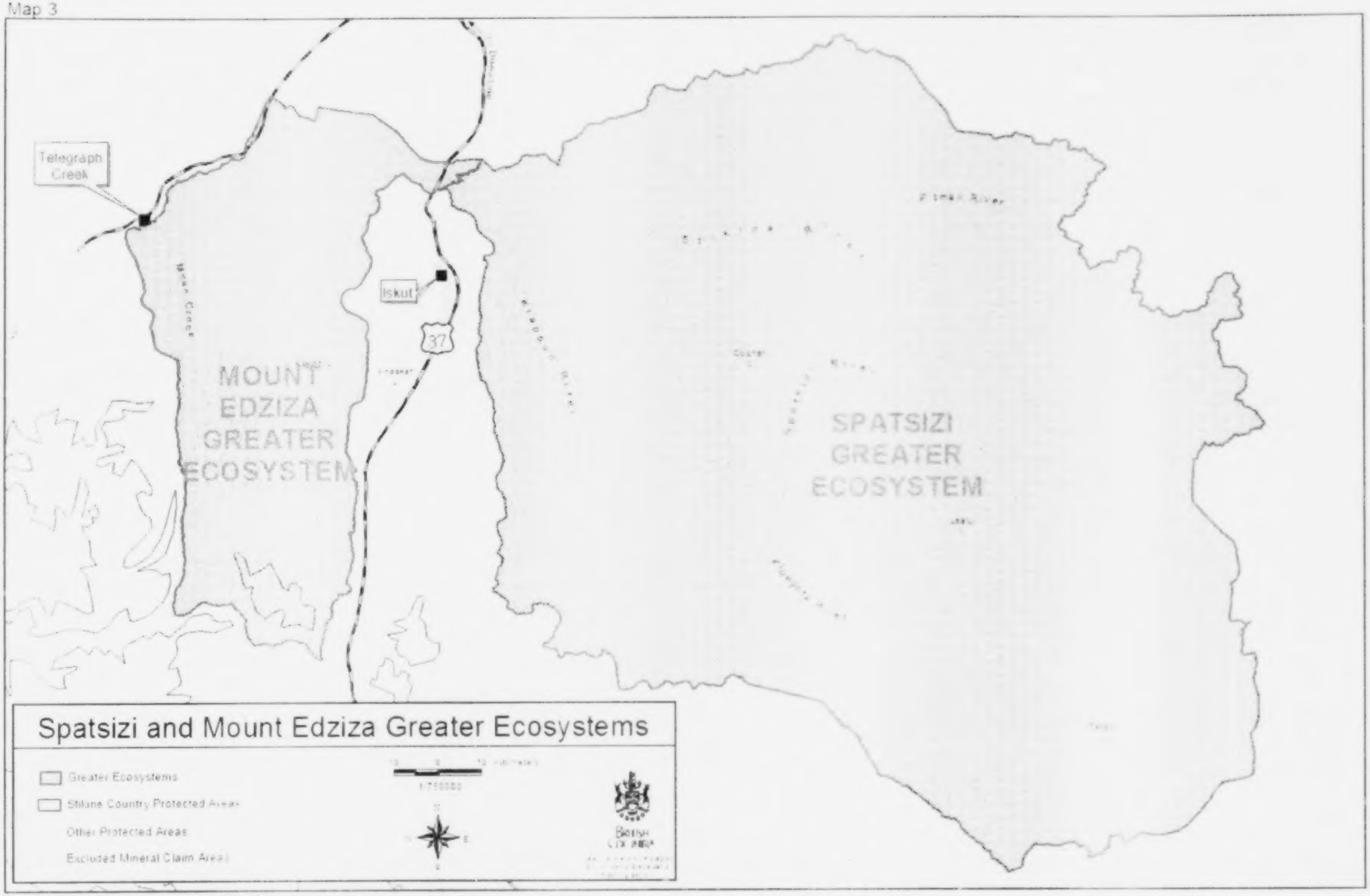
For Stikine Country Protected Areas, ecosystem structure and function in individual protected areas will be managed within the context of two regional-scale Greater Ecosystems (Map 3):

- the Spatsizi Greater Ecosystem; and,
- the Mount Edziza Greater Ecosystem.

Map 3. Spatsizi and Mount Edziza Greater Ecosystems.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/approved/map03_ecosys.pdf

Map 3


Spatsizi and Mount Edziza Greater Ecosystems
Greater Ecosystems
Stikine Country Protected Areas
Other Protected Areas
Excluded Mineral Claim Areas
1:750000
N
W
E
S
British Columbia
Telegraph Creek
Iskut
37
Mess Creek
MOUNT EDZIZA GREATER ECOSYSTEM
Klappan River
SPATSIZI GREATER ECOSYSTEM

These two "Greater Ecosystems" are based primarily on the distribution and range of the two woodland caribou populations in the area (the Spatsizi caribou population and the Mount Edziza caribou population) but ecosystem function includes all ecosystem components; other significant wildlife ranges and connectivity between the two Greater Ecosystems are also considered. Protected areas west of Highway 37 fall within the Mount Edziza Greater Ecosystem; protected areas east of Highway 37 fall within the Spatsizi Greater Ecosystem. The boundaries of the two "Greater Ecosystems" are ecologically based and are not administrative boundaries. Within each Greater Ecosystem, BC Parks' policies and management authority apply only to the protected areas.

Although defining geographic boundaries around an ecosystem places artificial limits on the extent of the ecosystem (i.e. organisms freely cross any geographically defined boundary and home ranges for many organisms straddle the boundary), geographic boundaries help define an area of interest for ecosystem features for management purposes. The boundaries of the two "Greater Ecosystems" should be considered only a guideline with respect to the extent of an ecosystem.

The Spatsizi Greater Ecosystem was defined using radio-collared caribou locations, inventory information, and local knowledge. It contains over 95% of the radio-collared caribou locations from the Spatsizi caribou population and represents an area large enough to support a viable large mammal predator-prey system. However, the range of many large mammal species, especially moose, grizzly bear and wolf, are contiguous with areas outside the Spatsizi Greater Ecosystem.

The Mount Edziza Greater Ecosystem was defined using inventory information and local knowledge. It includes the known ranges of the Mount Edziza caribou population, the Mount Edziza and Stikine River Canyon mountain goat populations, the Mount Edziza Stone's sheep population and Stone's sheep habitat adjacent to the south. The Mount Edziza Greater Ecosystem focuses on mountain dwelling ungulates confined to the Mount Edziza massif and the Grand Canyon of the Stikine River. Populations of moose and large carnivores (i.e. grizzly bear, black bear, wolf and wolverine) in this system are contiguous with areas outside of the Greater Ecosystem.

4.2.1 General Management Direction

Overall Direction

Ecosystem management in Stikine Country Protected Areas will focus on maintaining natural ecosystem structure (living and non-living components) and function (processes linking components) in time and space and will provide a context for all other management direction. Management strategies will consider natural changes including climate change and its effects on natural disturbance processes and distribution and abundance of ecosystem components. Humans are considered an important component of the larger ecosystem. The Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem provide a framework for ecological management within Stikine Country Protected Areas. Ecological issues in protected areas and portions of protected areas west of Highway 37 will be managed as one unit within the context of the Mount Edziza Greater Ecosystem. Similarly, ecological issues in protected areas and portions of protected areas east of Highway 37 will be managed as one unit within the context of the Spatsizi Greater Ecosystem.

4.3 Managing Ecosystems within the context of the Broader Landscape

Although Stikine Country Protected Areas protect significant portions of the Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem, administrative boundaries do not restrict wildlife populations as animals will move beyond protected area boundaries. Natural disturbance factors such as fire and forest insects are also not restricted by administrative boundaries. Management regimes outside of protected areas will influence protected area values, and management regimes within protected areas will influence values outside the protected areas. Although the Cassiar Iskut-Stikine Region is currently relatively undeveloped, future industrial developments may result in increased access to protected areas and changes to vegetation structure surrounding protected areas.

The Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem identify areas adjacent to Stikine Country Protected Areas where management activities may influence natural and cultural values centred within the protected areas. Appendix 4 lists features found adjacent to protected areas that are important for natural and cultural values centred within Stikine Country Protected Areas, and specific issues and concerns associated with those features. Because the Mount Edziza Greater Ecosystem is largely defined by the distribution and range of the Mount Edziza caribou herd, the greater ecosystem boundary generally corresponds to protected area boundaries.

Currently, most of the areas next to Stikine Country Protected Areas are unroaded; however, mining and forestry developments could result in potential new roads. Access routes will depend on the location and type of the extracted resource. Industrial interests could develop access routes to several areas adjacent to Stikine Country Protected Areas. These include routes to Shaft and Galore creeks west of Mount Edziza Provincial Park; Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) east of Mount Edziza Provincial Park; the Bowser Basin in the upper Klappan and Skeena rivers; and areas north east of the Stikine River near the Pitman and Chukachida rivers. Forest harvesting in the Klappan River drainage has been deferred for 15 years, but development is possible after that time. The Cassiar Iskut-Stikine LRMP directed that mining road access could be constructed through the Mount Edziza Protected Area (proposed), Pitman River Protected Area and Chukachida Protected Area with specific provisions. These potential changes in adjacent land use and the resulting access could affect values in those protected areas.

Two significant areas identified adjoining Stikine Country Protected Areas are the McBride River area and the Mount Edziza Resource Management Zone. Mount Edziza Provincial Park and Mount Edziza Protected Area (proposed) surround the Mount Edziza Resource Management Zone, formerly the Mount Edziza Recreation Area, except on its eastern flank. It is an integral component of the Mount Edziza Greater Ecosystem but was excluded from the park because of its potential mineral values. Access to this area and its management will substantially influence natural and cultural values in Mount Edziza Provincial Park. The McBride River area includes important winter range for the Spatsizi caribou population. Access to, and forest harvesting and mining activities in this area will influence the Spatsizi caribou population, centred within Spatsizi Plateau Wilderness, Stikine River, and Tatlatui provincial parks.

Stikine Country Protected Areas also provide some connectivity to other protected areas in northern British Columbia. Connectivity is important for maintaining the exchange of migrating and dispersing wildlife between those protected areas. The Chukachida Protected Area provides an undisturbed low elevation connection between Stikine Country Protected Areas and Finlay-Russel Park and Protected Area, which lies adjacent to the east. The Pitman River Protected Area also provides an undisturbed low elevation connection between Stikine Country Protected Areas and high value wildlife habitat to the northeast. Although not adjacent to Pitman River Protected Area, Denetiah Park, Denetiah Protected Area and Dune Za Keyih (Frog-Gataga) Park and Protected Area lie approximately 30 kilometres to the northeast.

4.3.1 General Management Direction

Overall Direction

Although the Stikine Country Protected Areas System contains significant areas of natural and cultural heritage values, additional areas adjacent to the system contain features important to some of those values. Management of those features will influence natural and cultural values centred in the Stikine Country Protected Areas System. Environmental Stewardship Division will continue to participate in management planning on lands next to Stikine Country Protected Areas to identify possible impacts on protected area values and to promote protected area values. Environmental Stewardship Division, Parks and Protected Areas Section will respect the management regimes outside the protected areas, including the need and appropriateness of industrial activities such as forest harvesting and mineral extraction, and will seek to minimize and mitigate potential effects on protected area values.

Objectives and Strategies

To coordinate with other agencies, First Nations, commercial operators and the public to minimize impacts on Stikine Country Protected Areas' values caused by activities on adjacent lands within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem.

- Work with other agencies and commercial interests to minimize and mitigate impacts of current and potential commercial activities and associated access in adjacent areas on natural, cultural heritage and outdoor recreation values of the Stikine Country Protected Areas System.
- Work with the Ministry of Energy and Mines during planning and development activities on lands outside of protected areas in the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem to minimize and mitigate impacts on protected area natural, cultural heritage and outdoor recreation values.
- Work with the Ministry of Forests to minimize and mitigate impacts of forest harvesting practices and associated road building on natural, cultural heritage and recreation values on lands adjacent to the Stikine Country Protected Areas.
- Work with other agencies and First Nations in vegetation management planning exercises on adjacent lands (i.e. landscape unit planning) within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem to promote compatibility of vegetation management objectives with those for Stikine Country Protected Areas, while respecting management regimes outside the protected areas system.
- Consider management objectives on adjacent lands when implementing Stikine Country Protected Areas vegetation management activities.

- Manage fires and forest insects near protected area boundaries in consideration of values adjacent to the protected area.
- Work with the Ministry of Forests to establish habitat management objectives for areas adjacent to the protected areas that are known to be used by protected area wildlife.
- Work with First Nations, other agencies and the public to minimize and mitigate impacts of activities outside protected areas on the large mammal predator-prey system centred in protected areas within the Mount Edziza Greater Ecosystem and Spatsizi Greater Ecosystem.
- Ensure protected area objectives are considered in hunting and trapping regulations in areas adjacent to Stikine Country Protected Areas System within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem.
- Cooperate with other agencies, First Nations and resource industries to maintain regional connectivity for wide ranging large mammal species.

4.4 Managing Smaller Protected Areas in the Cassiar Iskut-Stikine LRMP Planning Area

This management plan does not include some smaller protected areas located in the Cassiar Iskut-Stikine LRMP Planning Area. These include the Ningunsaw River Ecological Reserve; one frontcountry protected area - Kinaskan Lake Provincial Park; and ten backcountry protected areas - Border Lake, Choquette Hot Springs, Great Glacier, Iskut River Hot Springs, Lava Forks, Ningunsaw, Spatsizi Headwaters, Todagin South Slope, and Tuya Mountains provincial parks and Craig Headwaters Protected Area. In addition, another frontcountry protected area, Boya Lake Provincial Park, is located just north of the Cassiar Iskut-Stikine Planning area on Highway 37.

Frontcountry protected areas in the Cassiar Iskut-Stikine LRMP Planning Area (including Boya Lake Provincial Park) provide opportunities for more accessible outdoor recreation activities and provide a venue for delivering interpretive information on Stikine Country Protected Areas' values. Frontcountry and backcountry protected areas in the Cassiar Iskut-Stikine LRMP Planning Area protect natural, cultural heritage and recreation values and complement those values represented within the Stikine Country Protected Areas System covered in this management plan. Individual management direction statements guide management of these smaller protected areas.

4.4.1 General Management Direction

Overall Direction

Management of frontcountry protected areas in the Cassiar Iskut-Stikine LRMP Planning Area and Boya Lake Provincial Park complements Stikine Country Protected Areas by providing more accessible outdoor recreation opportunities and interpretation venues not available in the Stikine Country Protected Areas System. Backcountry and frontcountry protected areas in the Cassiar Iskut-Stikine LRMP Planning Area and Boya Lake Provincial Park will be managed to conserve natural, cultural and outdoor recreation values. Ningunsaw River Ecological Reserve will be managed to conserve natural and cultural values. All backcountry protected areas created through the Cassiar Iskut-Stikine LRMP will follow management guidelines provided in the LRMP.

5 Managing with First Nations

5.1 First Nations

Stikine Country Protected Areas lay within the traditional territories of two First Nations groups, with some overlap between territories. The Tahltan Band Council and the Iskut First Nation (collectively called Tahltan Nation) claim traditional territories over all Stikine Country Protected Areas. The asserted traditional territory of the Kaska Dena Council covers Tatlatui Provincial Park, a portion of the eastern part of Spatsizi Plateau Wilderness Provincial Park in the Chapea Creek and Metsantan Creek area, and all of the Chukachida Protected Area, where it overlaps with the Tahltan traditional territory.

A BC Parks/Tahltan Protected Areas Committee has been established and held 6 to 8 meetings leading to the preparation of this management plan.

In 1982, existing aboriginal rights were recognized and affirmed in Section 35(1) of the *Constitution Act, 1982.* Court decisions have clarified the nature of existing aboriginal rights, and, as a consequence, redefined the legal relationship between the Government of British Columbia and aboriginal peoples. In short, government activities cannot infringe upon existing aboriginal rights unless proper justification exists. In addition, the 1997 Supreme Court of Canada decision in *Delgamuukw* discusses aboriginal title, adding new factors that government officials must consider during consultation with First Nations.

The Province has an obligation to consider aboriginal interests in decision-making processes that could lead to impacts on those interests. This obligation, fulfilled in most instances through consultation, has been enforced by the courts to ensure that provincial decision-makers consider aboriginal interests appropriately, before there is a court determination that those interests amount to existing aboriginal rights and/or title.

The importance of proper consultation is illustrated in two recent landmark rulings. The BC Court of Appeal held that the provincial government has a duty to properly consult First Nations, pre-treaty, before proceeding with development on potential treaty settlement land (Taku River Tlingit First Nation v Ringstad et al., and Haida Nation v Ministry of Forests and Weyerhaeuser). Such cases clearly highlight the importance of undertaking proper consultation.

While the nature and scope of consultation may vary, the fundamental principles of consultation are the same for all aboriginal interests contemplated by policy. Government officials must diligently and meaningfully consult with First Nations with the intention of fully considering aboriginal interests. Where a sound claim of existing aboriginal rights and/or title is made out, consultation efforts must attempt to address and/or accommodate First Nations concerns relating to the impacts of proposed activities on the aboriginal interests that it identifies or of which the Crown is otherwise aware. In practical terms, this means the quality of consultation is of primary importance and the soundness of the claim will dictate the scope and depth of required consultation. Provincial and Ministry of Water, Land and Air Protection consultation guidelines provide direction to assist staff in ensuring meaningful consultation.

5.1.1 General Management Direction

Overall Direction

Environmental Stewardship Division will work with First Nations to ensure that existing aboriginal rights and title and treaty rights, where established, are accommodated and given priority consistent with court decisions. First Nations' interests will be fully considered in management of the Stikine Country Protected Areas System.

Objectives and Strategies

To ensure that ministry and government policy on consultation with First Nations is implemented.

- Consult with Tahltan and Kaska-Dene First Nations on any activities that have potential to infringe on existing aboriginal or treaty rights.
- Encourage and facilitate exercise of traditional activities by First Nations including contemporary uses such as cultural camps.
- Seek to obtain and incorporate traditional knowledge with science as a basis for management decisions.
- Fiduciary responsibilities of the Crown will be undertaken.

To work with First Nations to ensure their interests are considered in respect of the Stikine Country Protected Areas System and government to government partnerships are strengthened.

- Work with First Nations in responding to their interests and concern in protected area management, and to their interest in employment and economic opportunities generated by the protected areas system.
- Continue to support and implement the Agreement between BC Parks and the Tahltan Joint Councils that provides for a joint Protected Areas Committee (Appendix 5). This committee will provide advice to Environmental Stewardship Division on a wide range of issues related to planning, management and activities within areas of mutual interest.
- Work with Kaska-Dene First Nations to develop an appropriate mechanism to foster government to government relationships.
- Consult with First Nations on resource management issues.

5.2 Tahltan Land Stewardship Plan

The Tahltan Nation has prepared a draft Tahltan Land Stewardship Plan for the Tahltan (Stikine) Country Protected Areas in response to the draft Stikine Country Protected Areas Management Plan. The full text of the draft land stewardship plan is included below to indicate the perspectives, and desired direction and priorities of the Tahltan Nation but is not part of the direction in this protected areas plan. The draft Tahltan Land Stewardship Plan has not yet been ratified by the Tahltan Nation. To the extent feasible in a pre-treaty environment, the protected area management plan has been amended in recognition of Tahltan priorities for protected area management. It is anticipated that Tahltan priorities will also be discussed on an ongoing basis in the context of government to government discussion at the existing BC Parks/Tahltan Protected Areas Committee.

DRAFT - TAHLTAN LAND STEWARDSHIP PLAN
TAHLTAN (STIKINE) COUNTRY
PROTECTED AREAS

PART I - INTRODUCTION

Purpose

The purpose of this report is to assert Tahltan rights and authorities with respect to the management of protected areas that lie within Tahltan traditional territory. Tahltan traditional territory includes the "Stikine River and all the headwaters". The Tahltans wish to manage these protected areas co-operatively, on a government-to-government basis with the government of British Columbia. The following report summarizes our main concerns and priorities for the management of the protected areas within Tahltan traditional territory.

Context

The Stikine Country Protected Areas management plan covers a large protected areas system that is comprised of numerous parks and protected areas. The parks and protected areas within the Stikine Country Protected Areas system lie entirely within the asserted territories of the Tahltan Nation. These parks and protected areas were established without consultation with the Tahltans from 1972 to 2001.

In December 2002, BC Parks completed a draft management plan for the Stikine Country protected areas. This management plan was completed without consultation with the Tahltan Nation. In an attempt to meet consultation requirements, BC Parks provided funding in early 2003 to consult with the Tahltan Nation. The time allotted for such a large project was insufficient to conduct a thorough job. The Tahltan Nation feels that BC Parks has still not met consultation requirements.

The limited funding provided by BC Parks was utilized to begin the consultation process with the Tahltan Nation. A consultant was hired to organize and conduct community consultations. Community meetings were held in early April to obtain Tahltan issues and concerns regarding management of parks and protected areas. This report is a result of the consultation project and outlines Tahltan concerns and priorities for management of protected areas within our traditional territory. Please note, in order to meet consultation requirements, more time and funding are required to meet with the communities, individuals and families, and document their concerns, issues, priorities and visions for future management.

The Tahltans' contributions to the Stikine Country Protected Areas management plan are recognised and understood to be without prejudice to future treaty negotiations. The creation of parks and subsequent management planning are without prejudice to any existing aboriginal rights and are subject to the outcome of any treaty discussions.

PART II - VISION

The Tahltan Nation wishes to protect in perpetuity the natural and cultural environment found within the Stikine Country Protected Areas.

We seek co-management and aim to participate with the government of British Columbia on a government-to-government basis, as an equal partner in the planning and management of all parks and protected areas that lie within Tahltan traditional territory, including all those identified in the Stikine Country Protected Areas management plan; while protecting both Tahltan and Crown sovereignty.

The Tahltan Nation will rejuvenate our stewardship and re-establish our connections to our lands. The areas have been, and continues to be, used for food gathering, fishing, hunting, trade, trapping, medicine gathering, permanent, summer and winter occupation, social, recreational, ceremonial, spiritual and economic activities.

The management plan encourages and enhances traditional cultural heritage activities and related uses by the Tahltan Nation within the park and protected areas.

The Stikine Country Protected Areas system provides world class opportunities to learn and appreciate the Tahltan culture. Parks and protected areas will be managed to protect its important and diverse natural resources and cultural heritage while providing recreational activities, including commercial activities, in balance with Tahltan interests and pursuits.

We aim to see our traditional knowledge incorporated into western science on which to base management decisions. Parks and protected area management will study, investigate and implement Tahltan sustainable management approaches and techniques.

We will increase economic development and pursue economic opportunities that present themselves within parks and protected areas. The areas have been used, and continue to be used, for economic activities by Tahltan members "…because our lives depended on our country". The Tahltan Nation will develop cultural tourism ventures in the parks and protected areas.

The Stikine Country Protected Areas, lie entirely within Tahltan traditional territory, and encompasses an area that is both unique and remarkable. The Tahltan people belong to this land. We depend on our country; it is our mother, our provider, our home, our playground, our livelihood, and protection of our country is inherent to our survival.

PART III – TAHLTAN SOVEREIGNTY

Tahltans have lived in the area of the "Stikine River and all the headwaters" (Felix Jackson's description of Tahltan lands) since time immemorial. We have originated here on this land; the Tahltan people belong to this land. The source of Tahltan inherent sovereignty is from the fact of our prior occupation; therefore, the content of Tahltan rights is the same as prior occupation – hence Tahltan sovereignty and not aboriginal rights. Tahltans have always been independent and sovereign peoples. We have our own land rights, laws and governance that have never been extinguished. Tahltan values are passed to younger generations through oral stories, observation and practice. The following declaration was signed and delivered to the government of BC in 1910:

Declaration of the Tahltan Tribe

We, the undersigned members of the Tahltan tribe, speaking for ourselves, and our entire tribe, hereby make known to all whom it may concern, that we have heard of the Indian Rights movement among the Indian tribes of the coast, and of the Southern Interior of B.C. Also, we have read the declaration made by the chiefs of the southern interior tribes at Spences Bridge of the 16th July last, and we hereby declare our complete agreement with the demands of the same, and with the position taken by the said chiefs, and their people on all the questions stated in the said declaration, and we furthermore make known that it is our desire and intention to join with them in the fight for our mutual rights, and that we will assist in the furtherance of this object in every way we can, until such time as all these matters of moment to us are finally settled. We further declare as follows:

***Firstly** – We claim the sovereign right to all the country of our tribe – this country of ours which we have held intact from the encroachment of other tribes, from time immemorial, at the cost of our own blood. We have done this because our lives depended on our country. To lose it meant we would lose our means of living, and therefore our lives. We are still heretofore, dependent for our living on our country, and we do not intend to give away the title to any part of same without* *adequate compensation. We deny the B.C. government has any title or right of ownership in our country. We have never treatied with them nor given them any such title. (We have only lately learned the B.C. government make this claim, and that it has for long considered as it property all the territories of the Indian tribes of B.C.)*

Secondly *– We desire that a part of our country, consisting of one or more large areas (to be selected by us), be retained by us for our own use, said lands, and all thereon to be acknowledged by the government as our absolute property. The rest of our tribal land we are willing to relinquish to the B.C. government for adequate compensation.*

Thirdly *- We wish it known that a small portion of our lands at the mouth of the Tahltan River, was set apart a few years ago by Mr. Vowell as an Indian reservation. These few acres are the only reservation made for our tribe. We may state we never applied for the reservation of this piece of land, and we have no knowledge why the government set it apart for us, nor do we know exactly yet.*

Fourthly *- We desire that all questions regarding our lands, hunting, fishing, etc, and every other matter concerning our welfare, be settled by treaty between us and the Dominion and B.C. government.*

Fifthly *– We are of the opinion it will be better for ourselves, also better for the governments and all concerned, if these treaties are made with us at a very early date, so all friction, and misunderstandings between us and the whites may be avoided, for we hear lately much talk of white settlement in this region, and the buildings of railways, etc., in the near future.*

Signed at Telegraph Creek, BC, this eighteenth day of October, Nineteen hundred and ten by:

Nanok, Chief of the Tahltans,
Nastulta, alias Little Jackson,
George Assadza, Keneti, alias Big Jackson,
And eighty other members of the tribe.

Tahltans don't recognize BC Parks' boundaries as Tahltans still hold those lands. The Crown has never dealt with Tahltan land issue nor have they properly consulted Tahltans. Our people continue to speak; "Parks [the Crown] has no [land title] transfers signed to make it a park, hasn't been any" (Tahltan Elders community meeting, Telegraph Creek, 03 May, 2003).

"I wasn't doing anything different than what my ancestors did when they got obsidian and traded it with Nothcaw. If we made a living off the land before we still have the right to make a living off our land. We cannot take out their permits we support their system" (Willie Williams, 03 May, 2003, Tahltan Elders meeting, Telegraph Creek, BC).

PART IV - ABORIGINAL RIGHTS

The Tahltans' rights within the Stikine Country Protected Areas are recognized and affirmed in the *1982 Constitution Act* and outlined in other court decisions recognising and affirming aboriginal rights. Future use of protected areas could have implications on aboriginal rights and must be taken into consideration in all management plans, including the Stikine Country Protected Areas plan, as well as management direction statements, for all protected areas within Tahltan traditional territory. All management plans and management direction statements for protected areas within Tahltan traditional territory will provide direction to ensure there is no infringement on aboriginal rights. Aboriginal rights are inherent, not granted rights. These rights are constitutionally protected and must take precedence over the privileges of non-aboriginals in order for the Crown to full fill it's fiduciary obligations to the Tahltan nation.

Inclusion of the Tahltan Stewardship Plan is intended to indicate the perspectives and desired direction and priorities of the Tahltan Nation, but is not part of the management direction in the protected area management plan. Inclusion of the Tahltan Stewardship Plan is without prejudice to the positions that either the Tahltan Nation or the Province may take in treaty negotiations or court proceedings.

Members of the Tahltan Nation will continue to extract and harvest the resources of the land's and water within the Stikine Country Protected Areas system for traditional, ceremonial, societal, cultural, economic and sovereign uses. These include, but are not limited to, any practices of cutting selected trees, root digging, bark stripping, guiding, trading, hunting, trapping, fishing, berry picking, harvesting of medicinal plants, vision quests, camping, brush harvest for bedding mats, placing of caches, and other activities related to the above.

The Tahltan nation will continue to exercise our sovereignty, authority and jurisdiction as original occupiers of these lands. These include, but are not limited to, any practices of land stewardship and management; granting of trespass and harvesting rights, allocation, temporal and location conditions; habitat and population enhancement; and all other resource management decision making.

PART V - HISTORY

Pre-Contact

Clan Origins

There are 7 Tahltan clans, 3 Crow and 4 Wolf. Where the Crow clans come from is not known but James Teit wrote a story, as told to him by a Tahltan, that humans came from a tree that was giving birth (see Journal of American Folk-Lore, 1919 vol. 32, p. 216). Eva Calbreath and James Teit confirm the story that Crows originate in Tahltan lands.

> "The Ravens all belonged originally to Tahltan River or some place. There a woman had three daughters. Their children commenced to intermarry, and these incestuous unions led to quarrels. Then one Raven daughter went away and settled a Nahlin [Nahlin River area], another at Tleppan [Klappan River area]. Hence arose the three Raven clans." (Teit's notes, n.d.)

Eva Calbraith says it this way, "According to the story, it seems the Crow Clan are real Tahltan and the Wolf Clan all came from different countrys [sic]". There are 4 Wolf Clans, "Nanyai woman from Wrangell, married a Tahltan; a Tagish Quon woman walked into Tahltan from far north; Glogodena woman came from the Prairie, she followed the Stikine River up to Tahltan; Tulagodena woman came from the Prairie, she met the Tahltan somewhere around Dease Lake or further down" (Eva Calbraith, as written by the Tahltan Band Council, n.d. [circa 1996]).

The rights and obligations of each Tahltan individual is based on matrilineal, we follow our mothers. The clans are independent from each other and together create a confederation of Tahltan clans. Each clan has a certain location and has occupancy rights to these lands because of common origin and long-term occupation.

The Tahltans followed a permanent seasonal round of resource procurement throughout our traditional territory. We had recognized family and shared resource areas that were regularly returned to and managed for thousands of years. During winter, our people lived in lean-to's and subsisted on their annual harvest and game such as moose, caribou, bear, groundhogs, ptarmigan, beaver and grouse. It was during winter when ceremonial activities were conducted and members worked on clothing, utensils, tools, art and design. Spring and summer saw families roaming through the lands gathering and hunting. The salmon runs were major events where numerous families would gather to harvest the salmon. This was a time for trade and gatherings. Hunting was conducted year round but the majority of it was completed during fall. The extensive network of trails, archaeological and traditional use evidence reveals that the Tahltans utilized huge areas of territory including those designated in the Stikine Country Protected Areas.

The following is an exert from James Teits' notes:

> "The country was divided into lands of each clan, but members of other clans were allowed to hunt there if they asked the privileges, which was never refused. If people of other clans hunted there without asking permission it was resented, and the chief of the clan might tell them to get out or pay for what they had taken. Many people hunted on the grounds of other clans, but always told them they were going to hunt there and if the chief and no one objected they did so. Sometimes the grounds of a clan got in bad shape, needed rest, for game and fur were getting scarce. Then they let part or all of it rest until the game became plentiful again, maybe from 2 to 3 years, and the clan hunted on the grounds of other people. This was always arranged in a friendly way without trouble. The Indians looked well after the fur and game of the country so that should not get scarce. The chief of the clan directed the hunting and trapping so he knew where each household or individual was and saw that they did not interfere with each other and several did not trap on the same ground, as the first one there would have the best chance and all would suffer and have a poor catch. All these matters were arranged between the parties before they went out hunting and trapping. Usually each man let the chief and people know where he proposed to trap that season. Then the chief and the people arranged for all satisfactorily. The chief looked after the hunting grounds for the good of all, but did not own them, for they belonged to the tribe in common.
>
> The chiefs of the clans made regulations concerning the hunting grounds, trapping, etc. A wolf man married to a raven woman; his children inherited the right to hunt on the father's hunting grounds, and when grown up often used the hunting grounds of the father more than those of the mother. Thus there was no real restricting concerning hunting grounds. People of both phratries could hunt at any place, although certain families preferred to go to and preponderated in certain hunting grounds."

The Tahltan Nation also have our own government; it is based on our families and clans. We had no stores, police stations, jails, government buildings or hospitals. Yet our people lived in a society that was almost crime-free and people lived peacefully. Our extended family groups are the basis of our government, our health service, our police force, our justice system, our school system, and our welfare system. Our government was organized around our family/clan system. All decisions affecting Tahltans were made through holding meetings and councils. Every Tahltan was allowed to express their views and concerns. Problems would be identified and solutions were presented collectively. Respect was shown to everyone who had something to contribute. Individual input was valued and included in both the discussion and solution. The Tahltan Nation was a cooperative society, healthy and strong.

There were no written laws in our history. The rules we lived by were taught to us during childhood, through oral stories, and are based on respect. Tahltan people respect themselves, others, all things in our world, and for our environment; this is our law. Respect is shown through offerings and following proper protocol; protocol means showing respect by asking for permission.

If Tahltan laws were broken, the family or a council of Tahltan families, called Kuwegun, decided punishment. The penalty for breaking the rules depended on the seriousness of the crime. Penalties varied but included banishment, disownership, enslavement, repayment, shaming, ridicule, work chores, and death.

Tahltan traded mainly with the Tlingit and the Kaska Nations. Tahltans sometimes acted as middlemen between the Tlingit and Kaska Nations. Trade was an important part of Tahltan history.

Post Contact

Tahltan populations were greatly affected by mid-nineteenth century epidemics introduced by non-native contacts, yet we have overcome these losses. In the 1830's and again in 1848, hundreds of Tahltans died from smallpox and measles. Our numbers dropped from 2500+ in 1800 to 200 by the year 1900. Still we have survived.

Since contact, our people have been forced to change our lifestyles to fit into today's society, and still our culture has survived. Following the Cassiar Gold Rush in 1874, there were many changes in Tahltan society. Tahltans no longer lived the same lifestyle we had lived in the past. Instead, our people were forced to work for other people in exchange for wages. The Cassiar Gold Rush brought thousands of people into our lands. Glenora had a population of 3500 and it is estimated that 10,000 miners passed through there on their way to find gold.

In 1838, an employee of Hudson Bay Company Robert Campbell is the first European to make contact with the Tahltan. Upon the end of the very first visit, he records in his journal his actions when he left the valley of the Tahltan River; "…I forthwith hoisted the H.B.C. flag & cut H.B.C. & date on a tree, thus taking possession of the country for the company". This is one of the first acts of colonization, to claim the land on behalf of the Crown, to claim as if the original occupants do not exist. For an Indigenous group not to exist means the European legal concept of *Terra Nullius* guides the policy of colonization (see Curtis Rattray, Reviving Indigenous Sovereignty, 2003).

Imperial Order in Council of July 19, 1862 annexed Tahltan country, which was known as the 'Stickeen Territory', to the 62nd parallel as part of the colony of British Columbia. There was no consultation with the Tahltan people. There was no treaty signed. This act illegally allowed outsiders to trespass and set up trade in our country, with no consultation for proper permission, this continues today. The Crown in Right of British Columbia and Canada regulate and control all activities and trade in our country, as if the descendents of the original occupants do not exist. The European legal concept of *Terra Nullius* continues today to guides the policy of colonization in Canada.

The designation of parks and protected areas has altered our harvesting and land use patterns. Our people were not allowed to practice their traditional rights within their own territory. No consultation was conducted for the establishment of these parks and protected areas. Yet, in the spirit of good faith, the Tahltans' seek co-management and co-operation.

Tahltans are required to purchase, under duress, park use permits to practice traditional activities such as guiding and trapping that have been conducted prior to the assertion of Crown sovereignty and the establishment of the parks. We do so to show our good faith in co-operation and not to legitimize the Crowns' asserted jurisdiction.

Families have lost homes, cabins and traplines, without compensation, as these uses did not fit within the parks and protected areas' goals and priorities.

Access to parks and protected areas are restricted, and still we occupy and utilize our lands.

Our dedication and commitment to our land is undying, unmoving and our rights cannot be extinguished. We have spiritual connection to this land; we belong to this land and will continue to pursue our spirituality within our traditional territory. The parks and protected areas within the Stikine Country Protected Areas is the traditional home of the Tahltan people. We have hunted, trapped, fished, gathered food and resources, traded resources, gathered medicines, guided non-first nations' people for hunting, fishing and hiking, and ranched in this area and will continue to do so. Tahltans have lived, died, and defended our territory since time immemorial and will continue to do so.

Our history has proven that we are a strong and determined nation. The Tahltan Nation is willing to co-operate with the government of British Columbia in the management of Stikine Country Protected Areas. Above all, protection of our land and resources are inherent to our survival.

PART VI – MANAGEMENT OF PARKS AND PROTECTED AREAS

Place Names

The Tahltan people have been living in the Stikine area since time immemorial. Our language and traditions tie us to the land through traditional activities and place names. The following lists a few examples of Tahltan words that have been Anglicized.

Tahltan word	English version
"Det-ze-zi" - means "red goat"	Spatsizi
"Done-a-hee" - name of a man who died during travel	Danahue
"Ed-zee-tha" - describes the sound of the rock crushing beneath your feet as you walked on it	Edziza

These place names are only a few of numerous examples that describe our long-standing relationship between our people and the land and its resources. Our words have been Anglicized, in an attempt to extinguish our rights and to claim ownership for themselves. The Tahltan Nation has place names for all areas in our lands. The Tahltan Nation wants BC Parks to include our traditional place names on all signage, brochures, advertisement (web page), and maps for all parks and protected areas within Tahltan traditional territory.

Issues and Concerns Regarding Parks and Protected Areas

The following is a summary of issues and concerns raised by Tahltan people. These issues and concerns were voiced during community meetings held in April 2003. The following summary does not list all of the Tahltan Nations' issues and concerns. Further consultation is required to address Tahltan issues and concerns regarding parks and protected areas.

Title and Jurisdiction

- BC Parks and the provincial government have no title to the land.
- BC Parks has no authority to create parks and protected areas within Tahltan traditional territory.
- The creation of parks and protected areas within Tahltan territory without consultation and the lack of Tahltan participation in management decision-making are unconstitutional and unethical.
- The Tahltan Nation does not recognize park and protected area boundaries. This land is our traditional territory. We belong to this land.
- The Tahltan people feel it is time to stand up and fight for their land as the provincial government has taken too much of it already.
- The provincial government is selling our resources through permitting recreational activities, logging, mining, hydroelectric developments, hunting, and fishing.
- The provincial government then forces Tahltans to buy permits to log, fish, trap, etc.
- The Tahltan people fear that establishment of parks and protected areas will cause us to lose our places to hunt, fish, trap and conduct other traditional activities through land alienation.
- When parks moved in, Tahltans were forced out.
- All industry, including miners, guide outfitters, etc, must consult and request permission to trespass with the Tahltan Nation prior to extracting resources from our territory.
- Over the years, the BC government has consistently reduced quotas allotted to Tahltan guide outfitters. Throughout these quota reductions, no explanations or compensation were provided. Reducing quotas to guide outfitters in order to increase LEH permits or

extend open seasons is unreasonable.

- Increasing hunting pressure from non-locals raises concerns with the Tahltan Nation about how these resources are being managed, protected and allocated.

Occupancy

- Obsidian flakes and obsidian left from prior Tahltan occupation of Cold Fish Lake are present, proving Tahltan occupation before the European arrival.
- Raw pieces of obsidian have been found on the 'McEwan' trail just west of 'Cullivan Creek', illustrating that the present trail bed is the exact trail bed used by Tahltans prior to contact.
- In 1948, Alec Dennis' trapping cabin burned down in Spatsizi located in the Coldfish Lake area (Blackfox Creek) and other Tahltan members had a tent camp situated where the present camp at Coldfish Lake is located. This history proves previous occupation. Shortly thereafter, Tommy Walker built a tent camp and then cabins at this same location. The government then encouraged and allowed Tommy Walker to purchase this land. This conduct was illegal, as there was no reference to the holding that was already in place, the holding of Alec Dennis and the other Tahltan members. The provincial government provided no reference, no consultation, nor compensation to the families during this transaction.
- BC Parks has removed other Tahltan cabins within the Stikine Country Protected Areas without permission, consultation or compensation.
- Willy Williams has occupied his land, located near the Stikine River Bridge on Highway 37, since 1967, prior to park establishment. Under Tahltan laws, he is the rightful landowner of that land. Through administrative means, the BC government is trying to force this Tahltan elder off of his territory. Such administrative tactics include cancelling his lease-to-own agreement, forcing him to purchase park use permits and wood use permits, etc. Willy has worked hard to build a home, raise a family and run a business from his land, an area he occupies and uses according to Tahltan law. His family belongs to that land.
- There are several other land ownership situations within parks and protected areas that BC Parks and the Tahltan Nation must deal with. The members who are being affected by park and/or protected area establishment need to be identified. Once identified, management must decide on a course of action – provide compensation or exclude these areas from the parks and/or protected areas.
- It has been alleged that BC Parks has threatened to burn down Tahltan cabins located at 4 mile. This property belongs to Jackie Williams' family. In Tahltan tradition, Jackie Williams and his family belong to this land. This family has belonged to this land for generations. Jackie was born and raised on this land. Through Tahltan laws, Jackie Williams is the rightful owner of these lands, yet the BC government ignores this fact.
- Traditional use sites, spiritual areas need to be identified and protected.

Access

- A Tahltan member wanted to access Mt. Edziza, by private charter, to take his son to see his family's traditional area. His access was restricted as he could only fly with certain airline companies. His cost to access the park was more than doubled, as he had to fly with a company that had a park use permit and was not located in Telegraph. It is unjust to compel this Tahltan member to go out of his way and pay more than twice the cost to access his traditional territory. This is an administrative erosion of Tahltan rights to access the parks. A Tahltan accessing our own lands will not be counted towards a companies PUP quota.
- The draft management plan indicates that dog sledding will not be a permitted activity. Dog sledding is a traditional activity and mode of transportation for the Tahltan people. Transportation is an aboriginal right and is not limited by technology. Tahltan aboriginal

rights are not frozen in time and do include modern modes of transportation that allow Tahltans to access to our traditional territories.

- The draft management plan indicates that the use of horses will be restricted in some areas and limited in others. The Tahltan Nation traditionally used horses to pack gear and as a mode of transportation.

Park Use Permits

- Park use permits are issued freely and are not beneficial to the Tahltan Nation. The Tahltan Nation has not had the option to attain these commercial recreation opportunities.
- Tahltans do not require permits to conduct activities on our territory.
- Tahltans will receive funds collected for park use permits. The money will be used for training Tahltan people.
- Non-Tahltans and non-locals fill Park ranger positions. Positions that may be filled by Tahltan members or locals are given little or no opportunity to further their careers.
- Filming permits are awarded throughout Tahltan territory with no benefits to the Tahltans.
- Increasing visitation and issuance of park use permits within parks and protected areas raises concerns with the Tahltan Nation about how these activities may impact our traditional activities. The PUP conditions will state that the permittee will hire Tahltans.
- Tahltans will harvest mushrooms in our territory regardless of park boundaries and PUP.

Management

- Tahltans will assume 100% management of parks and protected areas in Tahltan territory.
- The Tahltan Nation does not validate the Agreement Between BC Parks and the Tahltan Joint Councils.
- The Tahltan will, in cooperation with BC Parks, document and practice Tahltan traditional knowledge and traditional ecological knowledge (TEK).

Current Management

As part of the, "Agreement Between BC Parks and the Tahltan Joint Councils", the parties have agreed to oversee and manage all initiatives and undertakings related to the planning, operation and management of the protected areas within Tahltan traditional territories. The parties have established protected areas committee comprised of 4 representative of the Tahltan Joint Councils and 4 representatives of BC Parks. Many Tahltans did not know of this agreement and did not receive any consultation. Therefore, the majority of the Tahltan Nation does not ratify this agreement. The Tahltan nation is re-structuring and the Tahltan Joint Council no longer represent the Tahltan. The re-structuring of the Tahltan nation is based on family representation, each family will have a representative on the Tahltan nation council table.

The current agreement is not a co-management agreement; it is simply an advisory council. At present, the Tahltans feel that this agreement has not been followed. There have been no meetings scheduled nor have any discussions taken place on the topics noted in this agreement. Yet, the Tahltans have observed that important management decisions are being made. The terms of reference and action plan have not yet been drafted. The Tahltan Nation is more than an advisory committee; we have un-extinguished inherent Indigenous Sovereignty; however, we do want to co-manage the parks and protected areas within our territory with the province of British Columbia.

The Tahltan Nation is restructuring and the Tahltan Joint Councils no longer represent the Tahltan. The restructuring of the Tahltan Nation is based on family representation, each family will have a representative on the Tahltan nation council table.

TAHLTAN PRIORITIES FOR PARKS AND PROTECTED AREAS MANAGEMENT

PART VII – CO-MANAGEMENT

The Tahltan Nation recognizes that numerous other First Nation groups have already established co-management agreements or memorandums of understanding with BC Parks regarding management of parks and protected areas. These include the Champagne-Aishihik, the Nisga'a Nation, and the Lytton First Nation to name a few. At a minimum, the Tahltan Nation will establish a Co-Management Agreement with BC Parks to manage all parks and protected areas within Tahltan traditional territory. The Tahltan Nation intends to assume complete management of these parks and protected areas within Tahltan traditional territory in the future.

It has been also acknowledged that in other agreements, BC Parks provides funding on an annual basis to employ First Nation watchmen or guardians. The Tahltan Nation would also like to see this funding opportunity in our area to hire Tahltan watchmen.

The co-management agreement may include the following topics and/or guidelines:

- Agreement will operate on a government-to-government basis.
- Board would consist of 3 Tahltan members and 2 BC Parks employees.
- Management decisions will be made in a timely manner.
- Determine total allowable fish and wildlife harvest within the parks and protected areas.
- Park and protected areas management plans.
- Access – by non-Tahltans, Tahltan, guided-visitors, etc.
- Culture and heritage – interpretation, education, signage, etc.
- PUPs – applications, award, special conditions, fees, etc.
- Facility maintenance and development (location, style/standard, renovations, etc)
- Economic opportunities for Tahltan Nation within parks and protected areas.

A Co-Management Agreement between BC Parks and the Tahltan Nation would be recognised and understood to be without prejudice to future treaty negotiations. The creation of parks and subsequent management planning are without prejudice to any existing aboriginal rights and are subject to the outcome of any treaty discussions.

PART VIII - ECONOMIC OPPORTUNITIES AND DEVELOPMENT

"…this country of ours which we have held intact from the encroachment of other tribes, from time immemorial, at the cost of our own blood. We have done this because our lives depended on our country. To lose it meant we would lose our means of living, and therefore our lives. We are still heretofore, dependent for our living on our country, and we do not intend to give away the title to any part of same without adequate compensation " (1910 Declaration of the Tahltan Tribe – emphasis added).

Employment Opportunities

Job opportunities

- Hire locals and Tahltan students to fill seasonal positions.
- Identify and optimize commercial, economic, training and employment opportunities for the Tahltan Nation.
- Provide sponsorship of training programs or on-the-job training.

Contracts and Tenures

- Reduce the scope on contracts to match the capacity of Tahltan businesses.
- Allow time for Tahltan businesses to develop the capacity to take advantage of economic opportunities such as park use permits and contracts.

Economic Opportunities

Park Use Permit Fees

- Park use permit fees – the Tahltan Nation would like a portion of the fees collected for the permits which allow commercial operators to conduct business on Tahltan lands.
- Park use permits – if issued to non-Tahltan, company or individual should provide some benefit to Tahltan Nation (i.e. royalties, employment opportunities, etc)
- Members of the Tahltan Nation will not pay permit fees (for trapping, guiding, mushroom harvesting, etc)
- Tahltans will have a say in the allocation and conditions of PUP.

Backcountry User Fees

- With increased visitation, the Tahltan Nation would like to consider charging users a backcountry user fee.
- If such a fee is instated, the Tahltan Nation would like a portion of these fees
- If instated, members of the Tahltan Nation will not pay backcountry user fees.
- Tahltans will participate directly in the allocation of backcountry visitation conditions.

Campgrounds

- The Tahltan Nation would like a portion of any revenue returned to the Province for the maintenance and operation of the Kinaskan Lake Provincial Park campground
- The Tahltan Nation convey our interest in the eventual maintenance and operation of the Kinaskan Lake campground
- We are interested in constructing other campgrounds – one near Stikine River Bridge and another near Telegraph Creek.

Commercial Opportunities

Presently, the Tahltan Nation is pursuing the following commercial opportunities:

1. *Coldfish/Spatsizi Culture and Ethno Eco-tourism Tours*
    - Tours would include hiking, horseback riding, wildlife photography, culture tours, biological/geological tours, nature study, angle guiding.
    - Tours would be based out of Coldfish Lake camp and educational in focus.
    - Camp still open to public but tourists can pay for guided day trips.
    - Longer tour packages would be available.
    - Winter activities would include cross-country skiing, ice fishing, snowshoeing and dog sledding.
2. *Gladys Lake Ecological Reserve Culture Tours*
    - Guided ethno-eco hikes into various parts of the ecological reserve.
    - Tours would include photography, wildlife viewing, ridge hiking, plant identification, oral history of Tahltan Nation, nature study, TEK, etc.
    - Use horses to transport clients along trails, which permit horse use within the ecological

Inclusion of the Tahltan Stewardship Plan is intended to indicate the perspectives and desired direction and priorities of the Tahltan Nation, but is not part of the management direction in the protected area management plan. Inclusion of the Tahltan Stewardship Plan is without prejudice to the positions that either the Tahltan Nation or the Province may take in treaty negotiations or court proceedings.

reserve. Clients can then dismount horses and hike into areas of the ecological reserve that does not permit horse use.

- Horseback rides and/or guided hikes into Gladys Lake and Gladys Lake cabin.
- The tour packages into the ER would be educational in focus.
- Tahltans would create a wildlife study program that will document wildlife observations on a long term continual basis.
- Guided visitation allows:
    - Better control over and reporting on number of visitors.
    - Better control over activities, guides can avoid sensitive areas.
    - Less concern about visitor safety issues and visitor satisfaction.
    - Allows for better monitoring (observe, record and report) abilities regarding illegal activities.
    - Provides excellent education and interpretation opportunities to both visitors and guides.
    - Allows for better monitoring (observation cards) regarding wildlife sightings that will be basis for the Nature study and TEK program and scientific studies into wildlife population and habitat.
    - Allows for better monitoring (impact assessments) of possible impacts to natural and cultural resources.
    - Provides visitors with a better understanding of the Tahltan culture.

3. *Stikine and Spatsizi River Rafting Tours*
    - Permit only Tahltan guides to provide rafting tours, which may include day hikes, wildlife photography, culture tours, angle guiding, etc.
    - Could offer single day and multi-day tours.
    - Guardian at Didene Portage can offer services to portage gear (for both guided and non-guided customers) + ferry visitors' vehicle to Stikine River bridge.
4. *Stikine River Jet Boat Tours*
    - Lower and upper Stikine.
    - Day and multi-day tours.
    - Tours may include hiking, wildlife photography, culture tours and angle guiding.
5. *Stikine River – Grand Canyon tours*
    - A Tahltan guide must accompany visitors to this location.
    - Tours can start from Tahltan, Pleasant Camp or the Stikine River Bridge.
    - Day hikes and/or multi-day hikes.
    - Visitors may go on horseback, ATV's or vehicle (on established roadways), or by foot.
6. *Angle guiding*
    - Buckley Lake
        - Buckley Lake offers the Tahltan Nation an excellent opportunity to guide anglers to a world class fishery.
        - Tahltan guides only.
        - Lake should be restocked if required.
        - Great lodge location.
        - Could also offer tours from this location into Mt. Edziza. Tours could include guided hikes, culture tours, wildlife photography, horseback riding, nature study, geological tours and angle guiding.
    - Tahltan River
        - Tahltan guides only for angle guiding.
        - World class wild steelhead fishery.

7. *Kakiddi Lakes Chain – Wilderness Tours*
    - Wilderness tours – may include canoeing, angle guiding, hiking, wildlife photography, horseback riding, and culture tours.
    - Excellent location for a lodge to attract frontcountry visitors to stay a few extra days.
    - Lodge could cater to visitors and businesses (conference area).
    - Businesses may provide both summer and winter activities.
8. *Lodges & Camps*
    - Possible locations include Spatsizi (Coldfish Lake), Stikine River (bridge, Tahltan River, Chuckachida River, Pitman River), Mt. Edziza (Kakiddi Lakes chain, Buckley Lake) Lodge opportunity to base tours in Edziza & Spatsizi.
9. *Obsidian*
    - Harvest obsidian.
    - Craft traditional tools, spears, arrowheads with obsidian.
    - Trade and sell obsidian crafts.
10. *Development of Iskut River Hotsprings*
    - Area presents an excellent opportunity to the Tahltan Nation to develop the site to attract visitors to stop and stay.
    - Area is close to highway 37 making it an ideal location to develop.

PART IX - ACCESS

The Tahltan Nation has unlimited access to any parks and protected areas within Tahltan traditional territory. Tahltans traditionally accessed their traplines and hunting areas by dogsled and will continue to do so, including use of snowmobile and other modes of modern transportation.

Increased access by non-Tahltans to our territory raises many concerns regarding sacred sites, traditional use site have impacts on land, water and wildlife populations. Spiritual and culturally significant areas should be protected and only be accessed by Tahltans. Non-natives must be guided (e.g. culture tours along the Stikine Canyon; Stikine River; historic trails such as the trails from Iskut to Telegraph or Metsantan to Iskut; angle guiding on the Tahltan River, etc).

The Tahltan Nation believes limitations placed on guided-visitor numbers is unreasonable as it hinders the business operators' ability to meet demands and allow their business to change with the times. These limits should be flexible as long as the resources are not being negatively impacted.

Other access issues such as horse use, aircraft, motor vehicles (including ATVs), boats and other conveyances must be discussed and part of the pending co-management agreement.

PART X – TRADITIONAL KNOWLEDGE

The Tahltan Nation wishes to see our traditional knowledge integrated with western science and base management decisions on this collective knowledge. However, before such a mission can be initiated, Tahltan traditional knowledge must first be researched and documented.

The following definition of traditional knowledge has been adapted from: "A Protocol Agreement between the Kaska Nation and The British Columbia and Yukon Chapters of the Canadian Parks and Wilderness Society". Traditional Knowledge means a cumulative body of knowledge, practice, and beliefs transforming by adaptive processes and handed down through generations by traditional educational and cultural transmission; about the relationship of human beings with one another and their environment including songs, stories, designs, dances, language, ceremonies and ways of doing things that reflect the Tahltan heritage, history, culture, ethics, creativity, spirituality and sovereignty of Tahltan People in the Tahltan traditional territory.

Denkladia is the spelling on the government maps; it is a mountain above the Spatsizi River. The Tahltan pronounce this place as Denekawladeeya "person walk into spear" this is a mountain with a story about how a part of the mountain was created and the consequences of why you never talk bad about animals or treat them bad. This is a story, like many other Tahltan stories that conceptualise why Indigenous Peoples say we are from the land, we are part of the land and why we must treat the land with respect.

Tahltans have intimate knowledge of our lands as our stories talk about how things came to be. We have our own laws and regulations of when and how people accessed resources. We have our own indicators of when the pressure has been on the land is too great; we have our own techniques of dealing with that pressure. We have our own understanding of what a healthy animal population is, and we have our own resource stewardship.

It is understood that Tahltan knowledge and western science is complementary to each other. To ensure an effective integration of the two knowledge bases, a program of documentation of Tahltan knowledge must be created and plans of action on the best integration approaches must be looked at to incorporation into resource management decision making processes.

PART XI – WILDLIFE MANAGEMENT

The Tahltan people have considerable knowledge of the wildlife in our area. As hunters, we needed to have knowledge about the animals we hunted. Knowledge such as learning about an animals' movements, habitat, their feeding and breeding activities, their denning areas, etc was essential information for a successful hunter. As we depended on harvesting fish and wildlife, we also had to manage our resources carefully. The Tahltan people were excellent resource managers. We had to be as our very survival depended on it.

Population Management

The Tahltan people managed wildlife by managing population numbers as well as managing their habitat. Predators were managed to increase prey populations for harvesting. The Tahltan Nation would like to ensure that active wildlife management actions such as predator management are conducted when there are indicators that the prey species populations are decreasing (i.e. cow-calf ratio).

Habitat Management

Tahltans also managed wildlife habitat by controlling, limiting, and prohibiting wildlife harvest within family hunting grounds. Areas were managed so that they were not over harvested. If an area was accidentally over harvested, harvesting in that area would cease until the resources replenished themselves.

Upon further investigation, it has been determined that Tahltans did use fire to increase berry crops and to increase wildlife populations in the past contrary to written report by Janice Joseph. Tahltans also enhanced wildlife habitat by intentionally setting fire to certain areas. Fires cleared land of brush and trees and allowed grasses and shrubs to revegetate an area, which provided better feeding areas for wildlife. Areas burned in the past that have significantly increased berry production, mushroom production and wildlife populations include Hyland, Beggarly, Tseta, Blackfox and Caribou Hide. Specific sites and instances must be further researched and documented.

The Tahltan Nation would like to ensure that active fire management such as prescribed burning occurs when habitat is degrading to a point where wildlife populations are decreasing.

Other:

- Need to incorporate traditional knowledge of wildlife into management practices.
- Wildlife surveys should be timed to take advantage of opportunities (i.e. surge in population) and incorporate traditional and local knowledge (i.e. where to conduct survey, etc)
- The Tahltan Nation would like to participate in all wildlife surveys.
- Tahltans are concerned about the increasing hunter numbers in Tahltan traditional territory and within the Stikine Country protected Areas.
- Areas of particular concern are the Klappan Rail Grade, Telegraph Creek Road, and the Stikine River.
- Increasing "outside" hunting pressure also impedes Tahltans' hunting for sustenance purposes and infringes on aboriginal rights.
- Tahltan Nation would like to jointly manage total allowable harvest numbers for fish and wildlife within Tahltan traditional territory.

PART XII – FISH MANAGEMENT

Fish is a main staple of the Tahltan diet. We have a long standing relationship with salmon. Salmon are vitally important to our people; salmon is a staple food, one that could be counted on every year. All types of fish are harvested, not just salmon. Our legends and landmarks emphasize our connection with fish and especially the salmon.

The Tahltan Nation will take part in management decisions concerning all fisheries, including steelhead, char, trout and salmon in all waters that lie within Tahltan traditional territory.

The Tahltan Nation wishes to participate in any research, surveys, and enhancement projects conducted within Tahltan traditional territory.

The Tahltan Nation sees an angle-guiding opportunity at Buckley Lake and wishes to pursue this opportunity. If it is determined that Buckley Lake was indeed stocked with rainbow trout, the Tahltan Nation would like to see that stocking continues within this lake to enhance angling opportunities.

The Tahltan Nation will have preferred opportunity for any new angling guide permits and/or additional rod days within Tahltan traditional territory.

The Tahltan Nation will jointly set angling regulations, for waters within Tahltan traditional territory, with the provincial government.

PART XIII – VEGETATION MANAGEMENT

The Tahltan people have harvested vegetation within our lands for sustenance, ceremonial and traditional purposes and will continue to do so.

Tahltans have traditionally used spruce boughs as bedding and will continue to do so.

Specific plants are extremely important to Tahltans, both for well-being of body and mind. Areas identified as being highly productive for these specific plants (i.e. caribou weed) will be protected from development and impacts will be monitored.

Tahltans will harvest mushrooms within Tahltan traditional territory.

PART XIV - PARK USE PERMITS

Currently, the Tahltan Nation has no say or authority on the issuance of park use permits. Opportunities are being awarded to non-locals and non-native peoples. The Tahltan Nation, through the pending Co-Management Agreement, want to have the right to refuse issuance or limit duration of park use permits – issuance of park use permits for commercial activity should be limited to Tahltans or benefit us in some way.

Park use permits are administratively extinguishing aboriginal rights. Traditionally, our lands and possessions are inherited by our children. Restrictions and conditions placed on park use permits does not allow trapline holders to pass down their traplines to their heirs. Applying park use permits to the Tahltan Nation forces Tahltans to ask permission and pay to practice their traditional rights (i.e. trapping, guiding, and access). These actions are unjust and infringes on aboriginal rights, which are protected and affirmed under the *1982 Constitution Act*. In addition, Tahltans should not have to pay for park use permits – we are simply practising our aboriginal rights.

For all other Park Use Permits issued under the authority of the *Park* Act, the Tahltan Nation wants a portion of these fees and should benefit the Tahltan people in some way.

PART XV – SCIENTIFIC RESEARCH AND MONITORING

The Tahltan Nation wish to incorporate our traditional knowledge with western science.

The Tahltan Nation would like to participate in any scientific research and monitoring projects that are conducted within Tahltan traditional territory.

A copy of all data and reports will be provided to the Tahltan Nation.

PART XVI – ENFORCEMENT

The Tahltan Nation will have their own watchmen to patrol, enforce and monitor wildlife, fish, and park regulations within Tahltan traditional territory. We seek funding from the provincial government to back this initiative.

All Tahltan members employed by BC Parks as a park ranger will display an additional crest on their uniform identifying them as a Tahltan watchman.

The Tahltan people believe we should monitor and police our own people. We have traditionally done so and we will continue to do so.

PART XVII – CULTURAL HERITAGE

Cultural heritage tells a story, Tahltan culture and heritage tells a story about Tahltans. The Stikine Country Protected Areas management plan should highlight the Tahltans' cultural heritage. The parks and protected areas within our traditional territory will encourage visitor appreciation, understanding and stewardship of the parks and protected areas' natural and cultural heritage.

Parks and protected areas management will protect, preserve, and encourage traditional sustenance, economic, cultural, spiritual and ceremonial activities in the parks and protected areas.

The Tahltan Nation believes that all park maps, brochures, signs, etc. should highlight the Tahltans' cultural heritage and include Tahltan art and design and place names. Tahltan place names should be incorporated into park brochures, park advertisement (web page) maps and signage.

BC Parks must recognize that Tahltan oral history is a valid and relevant form of research.

The Tahltan Nation wishes to develop self-interpretation facilities at strategic locations within the Stikine Country Protected Areas (i.e. Highway 37 Bell Irving to Telegraph Creek Self-Guided Auto Tour).

The Tahltan Nation has created a Tahltan Language and Cultural Committee (TLCC). The TLCC is responsible for: preserving and protecting Tahltan language and culture. Specifically this committee will be researching and documenting cultural and spiritual sites within the Stikine Country Protected Areas; developing a cultural resource management plan; determining which sites must restrict visitor access for the purpose of site protection and to provide exclusive use to Tahltan people; and developing policies for cultural heritage resources.

The Tahltan Nation would like to pursue the possible development of a cultural heritage centre, jointly with BC Parks and other government and non-government agencies.

We would like to jointly create a world class natural and cultural learning experience.

PART XVIII - SUMMARY

The Tahltan Nation has occupied the land in which the Stikine Country Protected Areas system lies, since time immemorial. In the past we have had a tumultuous relationship with the Government of British Columbia. The Tahltan Nation would like to develop a harmonious, long-term co-operative arrangement and process for the planning, operation and management of the parks and protected areas, within Tahltan traditional territory, with the Government of British Columbia.

Together, we can protect the natural resources and our cultural heritage. We can highlight and encourage Tahltan traditional use. We can create and foster economic opportunities and development to benefit the Tahltan Nation and local residents. Above all, together we can protect and preserve the parks and protected areas for all future generations to enjoy.

6 Managing with the Community

6.1 Local Communities, Stakeholders, Non-governmental Organizations and the Public

Local communities, stakeholders, non-governmental organizations (NGOs) and the public have a strong desire to be involved in the management of the protected areas system. Local communities of Dease Lake, Telegraph Creek and Iskut are seeking a greater say in the management of protected areas and in access to employment, economic development and outdoor recreation opportunities. Although considerable local interest exists about the Stikine Country Protected Areas System, substantial regional, provincial and international interest in the system is also evident.

6.1.1 General Management Direction

Overall Direction

Environmental Stewardship Division will work with communities, stakeholders, NGOs and the public at the local, regional, provincial and international levels to ensure that their interests in protected area management are considered. The Environmental Stewardship Division will also ensure ongoing opportunities for the public to provide input into protected area management, to receive protected area related information updates and to participate in specific protected area planning and management activities.

Objectives and Strategies

To foster communication between Environmental Stewardship Division and communities, stakeholders, NGOs and the public at the local, regional, provincial and international level on management and opportunities in the Stikine Country Protected Areas System.

- Establish a Stikine Country Protected Areas Advisory Committee for an initial 3 year term (subject to renewal) to advise on specific aspects of implementation of the Stikine Country Protected Areas Management Plan. The committee will be advisory to the Regional Manager of Environmental Stewardship Division, voluntary (i.e. without remuneration), and will focus on specific implementation items assigned by the Regional Manager of Environmental Stewardship Division. The committee will consist of representatives of Environmental Stewardship Division, First Nations, local communities, stakeholders and NGOs and will conduct 1 - 2 meetings per year with supporting teleconference calls, as required. Terms of Reference for the committee will be approved by the Regional Manager, Environmental Stewardship Division.
- Host periodic open houses/meetings and information sessions in local communities and regional and provincial centres that increase knowledge and communication while providing an opportunity to resolve identified issues.
- Ensure that updates to strategic planning for Stikine Country Protected Areas are available to the public.
- Ensure that local use and quality outdoor recreation opportunities continue to be available for residents.
- Provide information to local communities about upcoming opportunities for employment and economic development and work with entrepreneurs to ensure that: a) procedures and

rules for gaining access to opportunities are readily available; and b) timing and scope of opportunities, to the extent practical, are consistent with local capacity.

- Meet periodically with commercial operators to review operations and issues related to those operations.

To involve local communities, stakeholders, NGOs and the public in specific protected area management activities and planning.

- Investigate a range of partnerships with local communities, stakeholders, NGOs and the public such as:
  - commercial opportunities providing benefits to the protected areas system;
  - specific volunteer or stewardship projects (e.g. clean up of sites);
  - operation of facilities at Cold Fish Lake; and,
  - trail maintenance.

7 A Place for Cultural Heritage

7.1 Managing Cultural Heritage Values

Stikine Country Protected Areas contain a rich legacy of First Nations and non-aboriginal history and cultural heritage values. For thousands of years, First Nations people fashioned out of the natural surroundings within the Stikine area, a cultural landscape of traditional activities that reflected their interactions with nature. First Nations continue to harvest the area's fish, vegetation and wildlife according to long held beliefs and value systems. Traditionally, obsidian in Mount Edziza Provincial Park was an important commodity for survival and for trade for the Tahltan Nation. First Nations' village sites (Caribou Hide and Metsantan), hunting and fishing camps (aboriginal camp preceding the current Cold Fish Lake camp), trapline and other trails (aboriginal trail preceding the Hyland Post Trail), burial sites, and lithic related/archaeological sites are widespread throughout the Stikine Country Protected Areas System.

Figure 3. Historic photo of a Tahitan family.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal.htm

Non-aboriginal history began in 1824 with the fur trade. Gold discoveries, guided hunting and telegraph lines followed the fur trade era. In 1861 prospectors discovered gold on the lower Stikine River, leading to exploration of most of the Stikine River drainage by 1878. While miners found little gold within protected areas, parts of the protected areas lay on travel routes used by people going to gold producing areas.

The Hyland Brothers established Hyland Post on the Spatsizi River in the 1920s. The Hyland brothers used the trading post only for a short period, abandoning it by 1930. Tommy Walker used Hyland Post again in 1948 when he started guiding operations in the area. Hyland Post has been in continuous use ever since. Tommy Walker also set up a permanent camp at Cold Fish Lake. At this time other guide-outfitters set up operations including Love Brothers and Lee whose territory covered the Upper Finlay River including Tatlatui Provincial Park. Hyland Post comprises numerous buildings and, although privately owned, these buildings represent the earliest European settlement in the Spatsizi area. The present owners (Collingwood Bros. Guides and Outfitters) continue to maintain the buildings at Hyland Post.

The route for an overland telegraph line, known as the Collins Overland Project, was surveyed across Mount Edziza in 1866. The intent of the telegraph line was to connect New York to Europe via the Bering Strait. The laying of a trans-Atlantic telegraph cable meant the termination of this telegraph line project before construction took place through the Mount Edziza area. In 1900, the Yukon Dominion Telegraph Trail was established along much the same route as that surveyed by the Collins Overland Project. The Dominion Telegraph Trail connected the telegraph lines of southern areas to Whitehorse and Dawson City, and operated until 1936 when radio communication superseded it. Mount Edziza Provincial Park's Raspberry Pass contains some of the best preserved parts of the line where visitors can still see wire and poles. Gold miners and several cattle drives used the Telegraph Trail as a route to the Yukon Territory.

The Hyland Brothers used the Hyland Post Trail as a route from Caribou Hide to Telegraph Creek. The Tahltan Nation advises that this trail's route followed traditional routes used by aboriginal people. RCMP patrols later followed this trail, and guide-outfitters and backcountry hikers continue to use it now. The Hyland Post Trail is of high historical significance because of its importance as a primary aboriginal trade and travel route in the area, and its use as a route by early non-aboriginal residents and visitors.

7.1.1 General Management Direction

Overall Direction

Protecting aboriginal and non-aboriginal cultural heritage values is an important priority for management of the Stikine Country Protected Areas System.

Objectives and Strategies

To manage and conserve cultural heritage values.

- Protect archaeological sites and other significant aboriginal and non-aboriginal cultural heritage sites or traditional use sites in their natural state and condition.
- Work with First Nations to develop and share cultural heritage inventories and assess the significance of cultural heritage sites and potential for damage from public and commercial recreation.
- Develop protocol arrangements with First Nations on the sharing of cultural heritage inventories and other cultural information.
- Develop and implement strategies to reduce or eliminate adverse impacts to cultural heritage sites in conjunction with First Nations and user groups.

- Establish management protocols/strategies for important aboriginal and non-aboriginal sites and trails (e.g. Caribou Hide village sites, Metsantan Village site, Cold Fish Lake Camp, Hyland Post Trail, Telegraph Trail, etc.). Determine the need for site or trail restoration.
- Work cooperatively with the owners of the private property at Hyland Post to encourage management of cultural heritage values on their private property consistent with their importance with respect to aboriginal and non-aboriginal history.
- Establish an Initial Attack Zone for fire suppression around Metsantan village.

To facilitate the exercise of existing traditional uses and reconnection of First Nations to the Stikine Country Protected Areas System.

- Work with First Nations to facilitate the exercise of existing traditional uses and development of programs/initiatives to introduce First Nations youth to the Stikine Country Protected Areas System.

To increase public and visitor awareness of the rich cultural heritage of the Stikine Country Protected Areas System.

- In conjunction with First Nations and others, develop education and information materials to share with the public and protected area users on the nature, significance and fragility of cultural heritage values and ways to respect cultural heritage values.

8 A Place for Nature – Managing Natural Values

8.1 Introduction

Stikine Country Protected Areas conserve a diversity of natural features including:

- geological features such as the Mount Edziza volcano complex and the Grand Canyon of the Stikine River;
- a boreal vegetation landscape largely unaltered by management intervention;
- special rainbow trout (*Oncorhynchus mykiss*) only fish systems and contiguous streams;
- contiguous large rivers, streams and lakes believed to support blue-listed bull trout in the full diversity of its life histories;
- diverse large mammal predator-prey systems that include caribou, Stone's sheep, mountain goat, moose, deer, grizzly bear, black bear, wolverine, wolf and coyote (*Canis latrans*); and,
- some birds, plants, and plant communities at risk.

Because of northern British Columbia's remote location and relatively unroaded character, Stikine Country Protected Areas contain a vast expanse of primarily pristine wilderness relatively unaffected by management practices common in more accessible southerly locations. These protected areas are internationally renowned for their wildlife and wilderness. As the second largest system of adjoining protected areas in British Columbia, the Stikine Country Protected Areas System provides an excellent opportunity to manage large mammal predator-prey systems and large-scale natural disturbances in a natural setting within its boundaries. Conservation of natural and cultural features is the management priority in the Stikine Country Protected Areas System.

Hunting, fishing and trapping were important sustenance activities for the First Nations prior to contact. These activities continue to be important for First Nations and for other non-aboriginal people.

This section of the management plan describes natural features in Stikine Country Protected Areas, the general management direction and management objectives and strategies required to conserve those natural features.

The goal for applying ecosystem management in Stikine Country Protected Areas is to manage natural features and processes in the protected areas within the Mount Edziza Greater Ecosystem and the Spatsizi Greater Ecosystem so they remain in a largely natural state with minimal influence from human management and outdoor recreation activities.

8.2 Land and Geology

Stikine Country Protected Areas lay in the north central part of British Columbia in the Interior System of the Canadian Cordillera physiographic region (Holland 1976). Stream erosion, glaciation, and volcanic activity shaped most of the landforms in the Stikine region. Stream erosion produced deeply incised canyons and provided most of the relief throughout the plateaus.

Glaciers completely covered the area during the Pleistocene Age and they eroded upland surfaces and deposited a veneer of drift over most of the area. As the glaciers receded, characteristic U-shaped valleys formed and high elevation glaciers shaped most of the jagged ridges and mountain peaks. Volcanic activity occurred predominantly in the Mount Edziza area, both prior to and since the last Ice Age.

In the west, Mount Edziza Provincial Park and Mount Edziza Protected Area (proposed) are found in the Tahltan Highland. The highland is a transitional zone between the Coast Mountains and the plateaus to the east with relief primarily caused by the major rivers and streams. Mount Edziza and the Spectrum Range rise to an average elevation of 2100 metres with adjacent valley floors between 150 and 600 metres. Mess Creek forms a deep, narrow canyon near its confluence with the Stikine River. The Klastline River forms a canyon as it flows north to its confluence with the Stikine River. Glacial history is evident in drumlin formations in the Mowdade Lake area.

The Mount Edziza volcanic complex is an internationally significant feature. The complex comprises the Mount Edziza volcano, a series of smaller satellite cones surrounding the main volcano, and dissected domes of the Spectrum Range. A rolling upland plateau, bounded by escarpments and cut by a steep canyon, surrounds the main peaks of Mount Edziza (2787metres) and Ice Peak. Post-glacial cinder cones (e.g. Eve Cone, Coffee Crater, Cocoa Crater) and fields of blocky lava and pumice cover most of the north slope and western plateau. The lower lying valleys of Mess Creek to the west, the Stikine River to the north, and the Klastline and Iskut rivers to the east, border the Mount Edziza complex. The Arctic Plateau lies adjacent to the south part of the Mount Edziza complex.

Figure 4. Lava flow, Mount Edziza Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal.htm

Mount Edziza is a composite shield volcano with most of its mass made up of older sedimentary and volcanic rocks. The "recent" flows form a layer on top. The geological history of Mount Edziza comprises a series of volcanic activity periods and spans several periods of glacial advance and retreat. The Spectrum Range is older than Mount Edziza and its brightly coloured slopes are the eroded remnants of the original rhyolite dome complex.

The western portion of Stikine River Provincial Park lies within the Tanzilla Plateau on the north side of the Stikine River and the Klastline Plateau on the south side. Low topographic relief incised by the Stikine and Klappan rivers characterize both plateaus. One of the most significant features of this area is the Grand Canyon of the Stikine River. River erosion carved the steep incised lava walls up to 300 metres deep after the likely diversion of the Stikine River from its original path by Mount Edziza lava flows during and since the Pleistocene Age.

The Skeena Mountains include Gladys Lake Ecological Reserve and the southwestern portions of Spatsizi Plateau Wilderness and Tatlatui provincial parks. Mountain ranges and valleys run predominantly in a northwest trend with serrated and jagged peaks formed by alpine glaciation. The complex folding throughout Spatsizi Plateau Wilderness Provincial Park, Gladys Lake Ecological Reserve and Tatlatui Provincial Park is the best example of exposed folds in British Columbia other than in the Canadian Rocky Mountains, and is especially evident on the slopes at the western end of Kitchener Lake. Ammonite fossils have been found throughout the Eaglenest Range and have aided in understanding the complex geology of the area. The mountainous area rises from about 900 metres in elevation in the valleys to 2350 metres at Nation Peak in the Eaglenest Range in Spatsizi Plateau Wilderness Provincial Park and to 2350 metres at Melanistic Peak in Tatlatui Provincial Park. Spatsizi Mountain, with its red-coloured slopes, is a significant feature along the Spatsizi River in this area. The Tahltans named the mountain Spatsizi (which means "red goat") after the mountain goats that roll in the mountain's red-coloured soil.

The northeastern portions of Stikine River Provincial Park, Spatsizi Plateau Wilderness Provincial Park and Tatlatui Provincial Park lie within the Spatsizi Plateau. Gently rolling uplands and wide drift-filled valleys characterize the area with elevations from 900 metres in valley bottoms to 2200 metres on higher peaks on the plateaus. Most of the upland plateaus lie between 1400 and 2000 metres in elevation.

Pitman River Protected Area and Chukachida Protected Area extend east into the Swannell Ranges of the Omineca Mountains and the Stikine Ranges of the Cassiar Mountains. These protected areas lie largely within the wide U-shaped valley bottoms in this region.

8.2.1 Significant Physical Features

Significant physical features of Stikine Country Protected Areas include the Mount Edziza volcanic complex, the Grand Canyon of the Stikine River, fossils and complex folding (Appendix 6).

Numerous significant geological and landform features in the Mount Edziza area result from extensive volcanic activity (Appendix 6). The Mount Edziza area contains extensive deposits of obsidian, which is formed by the rapid cooling of molten lava or some liquid fraction of molten lava. Most obsidian occurs at relatively high elevations from about 1800 to 1900 metres. First Nations people used the Mount Edziza area as an important source of obsidian. The Mount Edziza area contains two exposed columnar basalt formations: the Tahltan Eagle at the confluence of the Tahltan and Stikine rivers, and Pipe Organ Mountain along the boundary between Mount Edziza Provincial Park and Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area). Both formations display radiating columns of basalt. The Tahltan Nation considers the Tahltan Eagle to have significant spiritual and cultural importance. The appropriate name and cultural significance of Pipe Organ Mountain to the Tahltan people is unknown.

The Mount Edziza area contains four hot springs at Elwyn Creek, Taweh Creek, Mess Lake and Mess Creek. Three of the springs (Elwyn, Taweh, Mess Lake) are the only hot springs known in Canada that appear to be related to recent volcanic activity. Mess Creek hot springs lie on a major fault bounding the west side of Mess Creek Valley and may be part of a deeply circulating hydraulic system. The hot springs, diluted with varying amounts of cooler water from creeks and runoff range in temperature from 25° to 45° Celsius. Elwyn Creek, Taweh Creek and Mess Lake exhibit tufa deposits. The Elwyn Creek springs consists of six springs (two warm, four cold) forming three large pools at the head of the creek with tufa formations in mounds and terraced benches along the creek valley. Taweh Creek has extensive tufa formations along a 650-metre stretch of the creek. Mess Creek consists of two principal vents at the base of a 20-metre cliff that form a pool approximately 200 m^2 and one metre deep. The Mess Lake hot springs have produced tufa deposits that cascade down gentle hill slopes and through lowlands covering over 120 hectares. Deposits around recent vents indicate that discharge likely took place as a geyser. One of the fossil vents stands approximately 10 metres high. In 1965, the Mess Lake hot springs exhibited vigorous flow. By 1974 the discharge rate was a trickle and by 1983 both the vents and adjacent terrace pools were dry. In 1999, some of the terrace pools contained water but the main vents remained dry.

8.2.2 General Management Direction

Overall Direction

The landforms and geologic features of the Stikine Country Protected Areas provide the structural definition that shapes the Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem. Conservation of significant geologic features will focus on interpretation and protection from physical disturbance by humans.

Objectives and Strategies

To protect the integrity of significant and fragile geological features from human disturbance.

- Provide recreation users and commercial operators with information about the significance of geological features, their vulnerability to human disturbance and appropriate activities next to and within these areas.
- Monitor the effects of outdoor recreation use on significant geologic features and designate routes, or prohibit activities on those features where required.

To gain further knowledge of the structure and function of geological features in Stikine Country Protected Areas.

- Encourage low-impact scientific research about the geology of Stikine Country Protected Areas and specific geological features.

8.2.3 Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To protect cinder cones and calcite deposits in Mount Edziza Provincial Park.

- Manage access on volcanic cones and, if necessary, restrict access to designated trails or prohibit all outdoor recreation activities on cones.
- Provide information to protected area visitors about the fragility of volcanic cones and specific direction about how to avoid damage to the cones.
- Restrict access on Eve Cone to the designated trail.
- Assess the Mess Creek hot springs for location and extent of plants and plant communities at risk.
- Manage access at the Mess Creek hot springs to allow for some access while avoiding disturbance to the calcite deposits.
- Provide information to provincial park visitors about the vulnerability of calcite deposits at Mess Creek hot springs to human disturbance and establish clearly marked trails to avoid damage to sensitive areas.
- Maintain the ban on helicopter landings on all cinder cones.
- Prohibit helicopter landings on calcite deposits, associated plant communities or other associated features at all the hot springs.

To protect obsidian and obsidian quarry sites.

- Continue to protect information on the location of obsidian quarry sites.
- Provide information to protected area visitors that stresses the cultural importance of the obsidian deposits to the Tahltan Nation, and that the removal of obsidian for recreational or commercial use is prohibited under the *Park Act* and the *Park and Recreation Area Regulation*. The Tahltan Nation asserts an aboriginal right to collect obsidian and advises that its members may choose to exercise this claimed right.

To communicate the significance of the Tahltan Eagle for travellers along the Telegraph Creek Road.

- Work with the Tahltan Band Council, the Iskut First Nation and the Ministry of Transportation to assess a possible pullout for viewing the Tahltan Eagle.
- Work with the Tahltan Band Council and Iskut First Nation to develop an interpretive package for the Tahltan Eagle.

To protect Pipe Organ Mountain.

- Work with the Tahltan Band Council, the Iskut First Nation, the Ministry of Energy and Mines and the mining industry to protect Pipe Organ Mountain.

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To protect Denkladia Mountain.

- Work with the Tahltan Band Council and the Iskut First Nation to protect Denkladia Mountain by considering limiting access to the area.

8.3 Water

The Stikine River and its tributary systems that flow in a generally westward direction to the Pacific Ocean dominate the hydrology of the Stikine Country Protected Areas System. The Stikine River forms the main part of Stikine River Provincial Park, which includes the lower elevation areas surrounding the Pitman and Chukachida tributaries. Spatsizi Plateau Wilderness Provincial Park contains the headwaters of the Stikine River and the river drains most of the larger lakes in the park including Happy, Tuaton, Laslui, Hotlesklwa and Chapea lakes. Buckinghorse and Klahowya lakes drain into the Spatsizi River, which converges with the Stikine River just north of Hyland Post. Gladys, Cold Fish, Blackfox and Bug lakes drain into Mink Creek, which empties into the Spatsizi River.

On the east side of Mount Edziza Provincial Park and Mount Edziza Protected Area (proposed), Mowdade, Mowchilla, Kakiddi and Nuttlude lakes form a chain of lakes that are emptied by Kakiddi Creek, which flows into the Iskut River. The waters of Buckley Lake on the north slope of the Edziza Plateau drain into the Klastline River, which flows northwest and joins the Stikine River. Mess Lake on the west side of Mount Edziza drains into the Stikine River via Mess Creek.

The waters of Tatlatui Provincial Park are the only waters in Stikine Country Protected Areas that are not part of the Stikine River system. All the major lakes in Tatlatui Provincial Park (i.e. Tatlatui, Hoy, Trygve, Kitchener and Stalk) feed into the Firesteel River, which eventually flows through the Finlay River into the Peace River and the Arctic Ocean.

8.3.1 General Management Direction

Overall Direction

Water quality, quantity and flow will continue to be regulated by natural events. Outdoor recreation and commercial use in the protected areas system will be managed to protect and maintain natural water quality.

Objectives and Strategies

To protect and maintain the natural quality, quantity and flow of rivers, creeks and lakes in Stikine Country Protected Areas within their natural range of variability.

- Develop indicators and baseline measures for water quality monitoring.
- Monitor water quality in the most heavily used areas (e.g. Cold Fish Lake, Stikine River at the bridge, Tuaton Lake, Fountain Rapids, Buckley Lake) and at permanent facilities, and implement strategies to offset, remediate or eliminate impacts from outdoor recreation or commercial activities if necessary.
- Assess and manage commercial and public use to ensure proper disposal of human waste and handling of fuel, batteries and other potentially hazardous waste products capable of harming the environment and aquatic systems.
- Develop a water quality monitoring strategy for other water bodies that considers outdoor recreation and commercial use levels.
- Ensure commercial and public users employ best practices for management and storage of human generated waste, fuel, hazardous products and other substances that are capable of harming the environment.
- Ensure sanitary facilities are properly designed and located.

- Work with other agencies to ensure that potential commercial activities adjacent to protected areas have minimal effects on natural water quality, quantity and flow of waters within the protected areas.
- Work with other agencies to follow Cassiar Iskut-Stikine LRMP management direction for water quality.
- Develop appropriate action plans to deal with known historic impacts on water quality.

8.3.2 Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To maintain natural water quality, quantity and flow in the Kakiddi Lakes chain.

- Monitor water quality in the Kakiddi Lakes chain prior to and after development if mining road access is required to Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area).
- Work with the Ministry of Energy and Mines and with the mining industry to minimize and mitigate impacts of mining activities on water quality, quantity and flow within Mount Edziza Provincial Park and the proposed Mount Edziza Protected Area if a mining road is developed through the proposed Mount Edziza Protected Area or if other mining activities occur adjacent to Mount Edziza Provincial Park or the proposed Mount Edziza Protected Area.

Pitman River Protected Area – Objectives and Strategies

To maintain natural water quality, quantity and flow in the Pitman River within Pitman River Protected Area.

- Monitor water quality in the Pitman River prior to and after development if a bridge/road is required across the Pitman River.
- Work with the Ministry of Energy and Mines and the mining industry to minimize and mitigate impacts on water quality, quantity and flow within the Pitman River Protected Area if bridge/road access is developed across the Pitman River or if other mining activities occur adjacent to the Pitman River Protected Area.

Chukachida Protected Area – Objectives and Strategies

To maintain natural water quality, quantity and flow in the Chukachida River within Chukachida Protected Area.

- Monitor water quality in the Chukachida River prior to and after development if a bridge/road is required across the Chukachida River.
- Work with the Ministry of Energy and Mines and the mining industry to minimize and mitigate impacts on water quality, quantity and flow within the Chukachida Protected Area if bridge/road access is developed across the Chukachida River or if other mining activities occur adjacent to the Chukachida Protected Area.

Stikine River Provincial Park– Objectives and Strategies

To maintain natural water quality, quantity and flow in the Stikine River and its tributaries within Stikine River Provincial Park.

- Monitor water quality in the Stikine River and affected tributaries prior to and after proposed forest harvesting north of the park.

- Work with the Ministry of Forests to minimize and mitigate impacts of forest harvesting practices and associated road building adjacent to the park on water quality, quantity and flow within the park.

8.4 Vegetation

Stikine Country Protected Areas comprise primarily boreal, subalpine and alpine vegetation. Vegetation features are diverse ranging from dry grassland slopes at 300 metres in Stikine River Provincial Park to lichens and hardy alpine plants at elevations over 2000 metres in Mount Edziza, Spatsizi Plateau Wilderness and Tatlatui provincial parks and Gladys Lake Ecological Reserve. Forests of white spruce (*Picea glauca*) and lodgepole pine (*Pinus contorta*) cover lower elevations, with subalpine fir (*Abies lasiocarpa*) dominating at higher elevations. Cold winters, short growing seasons and poorly developed soils affect the distribution and composition of vegetation communities within the protected areas. With the exception of low elevation coastal influenced vegetation ecosystems along the Stikine and Iskut rivers in the west, vegetation features in Stikine Country Protected Areas are representative of vegetation features in the larger Cassiar Iskut-Stikine Region.

Five biogeoclimatic zones occur within Stikine Country Protected Areas (Appendix 3). The Boreal White and Black Spruce (BWBS) Zone consists primarily of spruce and pine forests and occupies low elevation areas within the Stikine Country Protected Areas System. The Spruce-Willow-Birch (SWB) Zone is found above the Boreal White and Black Spruce Zone and extends from spruce dominated forests at lower elevations to subalpine fir forests and open woodlands and finally to mixed deciduous and coniferous shrubs at upper elevations. Above the Spruce-Willow-Birch Zone, the Alpine Tundra (AT) Zone consists of shrubs less than one metre in height at lower elevations. The shrubs gradually disappear higher up the mountain slopes where grasses, forbs and lichens become dominant. The Engelmann Spruce-Subalpine Fir (ESSF) Zone occurs below the Alpine Tundra Zone in the southern half of Mount Edziza Provincial Park. This zone consists of subalpine fir forests at low elevation, which change into open subalpine fir parkland further upslope. Below the Engelmann Spruce-Subalpine Fir Zone, the Sub-Boreal Spruce (SBS) Zone occupies low elevation valley bottoms along Mess and Kakiddi creeks.

A wide array of natural disturbance factors have influenced and shaped the ecosystems of Stikine Country Protected Areas. The ecosystem patterns that a person sees on the landscape today are the result of large scale and small-scale ecosystem processes. Large-scale events such as glaciation, volcanic activity, snow avalanches and landslides have contributed to both the physical and biological make up of the protected areas. Fire, another large-scale event, is the most significant disturbance factor that has created the landscape's current vegetation pattern. In Stikine Country Protected Areas, the effects of forest insects and windthrow are variable but tend to shape the vegetation mosaic at small to moderate scales. Processes such as forest diseases and solifluction contribute to the variability of vegetation patterns at a much smaller scale.

With a high degree of diversity in climate, terrain and vegetation, some plants and plant communities at risk occur in Stikine Country Protected Areas. However, only the Gladys Lake Ecological Reserve and parts of Mount Edziza Provincial Park have experienced even a moderate level of vegetation field investigations within their boundaries. Further vegetation exploration within Stikine Country Protected Areas will undoubtedly uncover additional plant species and ecosystems at risk and their associated localities.

Little is known about exotic or introduced plants and their effects on vegetation communities in Stikine Country Protected Areas. However, some degree of invasion by exotic species is likely, because of the history of human use in the area.

Forest cover mapping exists for Stikine Country Protected Areas but area summaries of forest cover types have not yet been compiled.

Figure 5. Spruce-Willow-Birch and Alpine Tundra biogeoclimatic zones. Laslui Lake area, Spatsizi Plateau Wilderness Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal.htm

8.4.1 Natural Disturbance Factors

Fire is the most significant natural disturbance factor that has shaped the recent vegetation mosaic of Stikine Country Protected Areas. Many of the forest stands are of fire origin and still have not reached the climax stage of succession because of the frequency of fire events.

Fire occurs most often in the Boreal White and Black Spruce (BWBS) Biogeoclimatic Zone within Stikine Country Protected Areas (Appendix 3). Fires can reach thousands of hectares in size and are larger than fires in the other zones. In the Spruce-Willow-Birch (SWB) and Engelmann Spruce-Subalpine Fir (ESSF) zones, fires occur less frequently with some sites not experiencing fire for 500 years. Fires in the ESSF tend to be small and often limited by topography or lack of fuel because of rock ridges, scree slopes, or less flammable vegetation. Fires in both the SWB and ESSF may originate in the zone itself or be driven into it from lower elevations. Fires in the Alpine Tundra (AT) Zone are relatively infrequent, small and of low intensity. Larger fires in this zone likely originate at lower elevations.

Human-caused fires appear to have had a greater impact than wildfires in Stikine Country Protected Areas especially in the area around the Grand Canyon of the Stikine River. The Grand

Canyon area of the Stikine River experienced some large human-caused fires in the 1950s and 1960s (Cichowski and de Groot 2000). The Wildlife Branch used prescribed fire to enhance Stone's sheep habitat at some sites within Stikine Country Protected Areas. Although Tahltan history has not been well documented, recent information indicates that the Tahltan people may have used fire for enhancing wildlife habitat or berry production, or as an aid for hunting.

Fire suppression has likely had little influence on the forest mosaic in Stikine Country Protected Areas because of the remoteness and efficiency of fire suppression in the area (Parminter 1983). The vegetation landscape is therefore likely almost identical to what would have occurred without fire suppression intervention.

Fire management plans for existing protected areas guide current fire suppression activities. In general, full suppression occurs only where fires threaten existing structures and facilities and prescribed fire may be allowed to enhance wildlife habitats and rejuvenate vegetation succession. Gladys Lake Ecological Reserve is also currently under full suppression. Some updating of fire management plans is required to include additions and changes to protected areas, and to update and standardize fire management strategies.

Forest insects and windthrow have had limited effects on the vegetation landscape in Stikine Country Protected Areas. Forest insects, such as mountain pine beetle (*Dendroctonus ponderosae*) and spruce beetle (*Dendroctonus rufipennis*), do not appear to have significantly altered the forest mosaic in the region. Although they may occur at extremely low endemic levels in the forests of Stikine Country Protected Areas, outbreaks are unlikely because of the cold northern climate. Balsam bark beetles (*Dryocoetes confuses*) likely have the most significant presence in the area, as they are prevalent throughout northern British Columbia. Little information is available on forest insects in Stikine Country Protected Areas. The most recent aerial survey in the area was conducted in 1994 and but was restricted to the area west of Highway 37. That survey detected balsam bark beetle as the most common forest insect.

Climatic conditions appear to limit the extent of most forest insect activity in Stikine Country Protected Areas. If long-term climate conditions in the Stikine Country Protected Areas region become warmer and drier, increased levels of forest insect activity may result.

Other disturbances such as wind and forest diseases affect the vegetation landscape at a smaller scale. Currently no information exists about the extent and distribution of windthrow in Stikine Country Protected Areas and little is known about forest diseases. Disturbances caused by forest diseases provide small openings in the forest canopy and do not have the same potential for creating landscape level disturbances in Stikine Country Protected Areas as do other disturbance factors.

Recently, global warming has resulted in increased average temperatures in Canada. In British Columbia, the greatest increase in temperatures during the last 10 years appears to have occurred in the northwestern part of the province. These changes, if they continue, could result in changes in natural disturbance frequency and severity.

8.4.2 Plants and Plant Communities at Risk

Three red-listed and 22 blue-listed vascular plant species are known to occur within Stikine Country Protected Areas (Appendix 3). Most of the red and blue-listed vascular plants occur in subalpine and alpine habitats. An additional 25 plant species of taxonomic or distributional interest have been recorded in Gladys Lake Ecological Reserve (Appendix 3) and 11 rare plant communities are known to occur within Stikine Country Protected Areas (Appendix 3). All of the rare plant communities are associated with either steep, dry slopes or mineral springs. Extensive grazing pressure affects many of the dry steppe plant communities found in the Stikine River Canyon area outside of the protected areas.

**Figure 6. Surveys for plants and plant communities at risk.
Gladys Lake Ecological Reserve.**

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal.htm

Because of the harsh environmental conditions present within Stikine Country Protected Areas, many plant communities are highly susceptible to physical damage. Plants at risk are often associated with extreme conditions such as extremely dry or exceptionally wet sites, which are among the most prone to damage. In addition, lichens, an important food source for caribou, are also highly sensitive to physical disturbance and are especially vulnerable to damage during summer when they are dry. Because they grow extremely slow, lichen recovery following disturbance could take 50 - 100 years.

In the Spruce-Willow-Birch Biogeoclimatic Zone, dry scrub birch/lichen, dry trembling aspen and plant communities on south and west-facing slopes are vulnerable to disturbance. In the Alpine Tundra Zone, the mesic Altai fescue, dry lichen and moist sedge-moss plant communities are sensitive. These plant communities are common on the alpine plateaus. Plant communities colonizing relatively recent lava flows in Mount Edziza Provincial Park and areas where glaciers recently receded are living under harsh conditions and are extremely vulnerable.

8.4.3 Human Influences

Historically, First Nations inhabited the Stikine Country Protected Areas System. However, during the last 50 - 100 years, much of the area's human use has been from outdoor recreation users or from commercial operators, who provide recreational guiding services, primarily guided hunting and angling. Human influence on the vegetation landscape includes: direct disturbance to plants and plant communities at heavily used and/or sensitive sites; introduction of non-native plants; horse use and grazing; and accidental or deliberate human-caused fires.

The *Park Act* prohibits the destruction or removal of protected area natural resources, including vegetation, except for protected area management purposes or unless specifically permitted to do so. In Stikine Country Protected Areas, vegetation has been altered for habitat management, trail maintenance and campsite establishment. Some guide-outfitters are permitted to provide firewood for camps.

8.4.4 General Management Direction

Overall Direction

Natural disturbances such as fire, forest insects, wind, and forest diseases are considered essential ecosystem components contributing to the vegetation landscape and the function of natural ecosystems. The Stikine Country Protected Areas System is large enough to accommodate natural disturbance events within the system. Vegetation management will focus on maintaining natural disturbance events and minimizing the impacts of human activities.

Objectives and Strategies

To maintain and monitor naturally occurring vegetation patterns and natural disturbance events within the range of natural variability.

- Allow natural disturbance events to continue driving the dynamics of the vegetation landscape.
- Consider vegetation manipulation using tools based on natural disturbances (e.g. fire) to restore natural ecosystem structure and function if necessary.
- Assess long-term climatic conditions to determine potential changes in natural disturbance patterns.
- Conduct periodic monitoring for forest insect disturbances and, if consistent with management intent of the plan, or to protect values outside the protected areas system, manage forest insects with fall and burn or prescribed fire.
- Develop a vegetation management plan that addresses current vegetation patterns, natural disturbance management and climate change. Key elements should include:
  - ➢ knowledge base:
    - ⇨ biogeoclimatic zone/ecosection descriptions;
    - ⇨ forest cover mapping interpretations;
    - ⇨ ecosystem mapping (if available) interpretations;
    - ⇨ current and historic natural disturbance patterns;
    - ⇨ First Nations relationship to vegetation and vegetation management;

    - ⇨ human use influences on vegetation including site degradation and introduction of non-native species.
  - ➢ historic management activities and their effects:
    - ⇨ fire suppression;
    - ⇨ forest insect and disease management;
    - ⇨ prescribed burning;
    - ⇨ vegetation management activities on adjacent lands.
  - ➢ vegetation management zones;
  - ➢ appropriate levels of natural disturbance;
  - ➢ appropriate types and levels of vegetation management activities;
  - ➢ effects of protected area vegetation management policies on vegetation on adjacent lands; and,
  - ➢ information needs.
- Assess the current state of knowledge of vegetation features in Stikine Country Protected Areas and determine further information needs including information on species at risk.
- Revise fire management plans to include additions and changes to protected areas, and to update and standardize fire management strategies to reflect vegetation management direction in this plan.
- Maintain Initial Attack zones for fire suppression in current fire management plans.
- Consider habitat manipulation for:
  - ➢ wildlife populations or portions of populations that are significantly declining because of deteriorating habitat conditions resulting from human disturbance or intervention;
  - ➢ species that are at risk or sensitive species if populations are threatened; or,
  - ➢ local populations that are at risk of becoming extirpated or that are in marked decline (i.e. >50% of baseline population).

  Habitat manipulation will not be considered for the primary purpose of maintaining or enhancing wildlife populations for recreation purposes such as hunting or wildlife viewing. Habitat manipulation will be conducted using only tools based on natural disturbances (e.g. fire). Consider whether outdoor recreation activities (consumptive and/or non-consumptive) should be removed in the area where habitat manipulation is conducted, until the population has recovered.
- Ensure that protected area management strategies do not establish or maintain unnatural ecological conditions.

To manage vegetation features and disturbances within a larger regional context.

- Work with other agencies and First Nations in vegetation management planning exercises on adjacent lands (i.e. landscape unit planning) within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem to promote compatibility of vegetation management objectives with those for Stikine Country Protected Areas, while respecting management regimes outside the protected areas system.
- Consider management objectives on adjacent lands in vegetation management activities within Stikine Country Protected Areas.
- Continue to work with the Ministry of Forests Protection Branch to achieve protected area fire management objectives.
- Manage fires and forest insects near protected area boundaries in consideration of values next to the protected area.

- Establish an Initial Attack Zone for fire suppression on the north side of the Stikine River near the McBride River to minimize impacts from fires originating in the protected areas system on commercial forest values in the adjacent McBride River area.
- Manage natural disturbances within the group of Stikine Country Protected Areas in the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem rather than in individual protected areas.

To protect plants and plant communities at risk.

- Identify and map known localities of plants and plant communities at risk, and sensitive plants and plant communities (Appendix 3).
- Protect known localities of plants and plant communities at risk and sensitive plants and plant communities from public use and commercial disturbance. Develop and implement a strategy to prevent disturbance if necessary.
- Assess the new areas added to the protected areas system (Mess, Klastline, Metsantan, Stikine River, Pitman, and Chukachida) for plants and plant communities at risk, and sensitive plants and plant communities.
- Assess all Stikine Country Protected Areas for rare and sensitive plants and plant communities (e.g. use air photos to identify potential locations).
- Conduct further assessments of existing protected areas for plants and plant communities at risk and sensitive plants and plant communities.

To minimize human disturbance to native plants and plant communities.

- Conduct vegetation assessments prior to development or relocation of facilities or trails.
- Inventory and assess already established facilities and trails for damage to native plants and plant communities.
- Monitor the effects of existing grazing activities on native plants and plant communities. Develop and implement a strategy to reduce those impacts if necessary.
- Assess the distribution and extent of non-native plants within Stikine Country Protected Areas and determine their impacts on natural vegetation features.
- If necessary, develop guidelines to reduce the current distribution and extent of non-native plant species, and/or to reduce potential future introductions.
- Identify and eliminate "noxious weeds" with low impact techniques such as removal by hand, and low intensity burns as required.
- Develop a firewood management strategy that includes an assessment of supply and demand and strict guidelines on the removal of vegetation for supplying firewood.
- Monitor the demand for and use of firewood/heating fuel and restrict consumption if necessary.

8.4.5 Protected Area-Specific Management Direction

Although some protected area-specific management objectives focus on protecting specific plant and plant communities at risk, other plants and plant communities at risk occur in other protected areas and are addressed under general management direction for the system.

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To protect terrestrial lichen and plant communities at risk on volcanic cones.

- Manage access to volcanic cones and, where needed, restrict access to designated trails or prohibit all outdoor recreation activities on cones.
- Provide information to provincial park visitors about the sensitivity of lichen and plant communities growing on volcanic cones.
- Restrict visitor access to Eve Cone to the designated trail.

To minimize impacts of natural disturbances originating in Mount Edziza Provincial Park and the proposed Mount Edziza Protected Area on commercial forest values adjacent to the eastern boundaries in the Willow Creek area.

- Continue to implement initial attack on fires originating on the east side of Mount Edziza Provincial Park.
- Monitor forest insects in the park and protected area and conduct fall and burn operations on the east side of Mount Edziza Provincial Park and the proposed Mount Edziza Protected Area if necessary.

To protect plant communities at the Mess Creek and other hot springs.

- Assess the Mess Creek hot springs and other hot springs for location and extent of plants and plant communities at risk and sensitive plants and plant communities.
- Manage access at the Mess Creek hot springs and other hot springs by providing designated trails while avoiding disturbance to plants and plant communities at risk and sensitive sites. The Cassiar Iskut-Stikine LRMP provides the following direction for the Mess Creek hot springs area (Cassiar Iskut-Stikine LRMP 2000): *"Provide designated trails to minimize damage to calcite deposits"*.
- Provide information to protected area visitors about the vulnerability of plants and plant communities at Mess Creek hot springs.

Stikine River Provincial Park - Objectives and Strategies

To protect dry steppe plant communities at risk along the Stikine River.

- Identify and map known localities of plants and dry steppe plant communities at risk along the Stikine River.
- Protect the known localities of dry steppe plant communities at risk from human disturbance.

To minimize impacts of natural disturbances originating in the park on commercial forest values adjacent to the north in the McBride River area.

- Establish an Initial Attack Zone for suppression of fires originating on the north side of the Stikine River in the vicinity of the McBride River.
- Monitor forest insects in the park and conduct fall and burn operations in the vicinity of the McBride River if necessary.

Tatlatui Provincial Park– Objectives and Strategies

To assess potential northern migration of forest insects into the Stikine Country Protected Areas System.

- Assess and verify reports of mountain pine beetle attack near Tatlatui Lake.
- Develop a strategy for managing any mountain pine beetle attacked sites.

Spatsizi Plateau Wilderness Provincial Park and Stikine River Provincial Park (in Spatsizi Greater Ecosystem) – Objectives and Strategies

To monitor and rehabilitate heavily used campsites and trails along the Stikine River.

- Rehabilitate heavily used campsites along the Stikine River canoe route (e.g. Fountain Rapids) and designate camping areas, if needed, to prevent further damage.
- Discourage firewood collection at Fountain Rapids. Provide visitors with information (in the brochure; at the information shelter at Tuaton Lake; as part of an information package to be distributed by aircraft charter companies) to collect firewood prior to arriving at Fountain Rapids.
- Rehabilitate and improve the portage trail at Fountain Rapids to avoid damage to wet areas.
- Continue to monitor the condition of campsites and trails and implement strategies to rehabilitate damaged areas and to avoid further impacts.
- Assess the extent and impacts of unauthorized camps (e.g. along the Stikine River downstream from the mouth of the Spatsizi River) and develop site plans as needed. If necessary, remove some sites and designate formal camping areas.
- Assess horse impacts at guide-outfitter camps and develop strategies to reduce and prevent impacts in consultation with guide-outfitters.

To protect Metsantan Village from fire disturbance.

- Establish an Initial Attack Zone for fire suppression surrounding the Metsantan Village site.

8.5 Wildlife

The Stikine Country Protected Areas System is renowned for its variety and abundance of wildlife, especially large mammals. Caribou, Stone's sheep, mountain goat, moose, grizzly bear, black bear and wolf all inhabit both the Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem. Although the Stikine Country Protected Areas System is large enough to accommodate most habitat and life cycle requirements for most of those species, animals frequently move beyond protected area boundaries and some require large areas to maintain minimum viable populations. Numerous smaller wildlife species are also present. For those species the Stikine Country Protected Areas System provides all necessary life cycle requirements and is large enough to maintain viable populations.

Human activities such as hunting, trapping, outdoor recreation and commercial activities, and land management practices beyond protected area boundaries influence wildlife numbers and behaviour in the Stikine Country Protected Areas System. Although the Stikine Country Protected Areas System was the focus of some inventories and research studies since the 1960s, basic information on some species and recent inventory information still is lacking.

8.5.1 Large Mammal Predator-prey System

One of the most outstanding biological features of Stikine Country Protected Areas is the diverse large mammal predator/prey ecosystem that exists in a relatively undisturbed natural setting. The four main species of ungulates that live in northwestern British Columbia – Stone's sheep, mountain goat, caribou and moose - exist in all four large provincial parks (i.e. Mount Edziza, Spatsizi Plateau Wilderness, Stikine River and Tatlatui provincial parks) and in the Gladys Lake

Ecological Reserve. Mule deer, which occur infrequently in northern British Columbia, live in pockets of habitat in Spatsizi Plateau Wilderness Provincial Park, Mount Edziza Provincial Park and the Stikine Canyon area of Stikine River Provincial Park. Wolf, grizzly bear and black bear are the main predators of these ungulates found in Stikine Country Protected Areas. Other predators such as wolverine, lynx, coyote and golden eagle kill extremely young ungulates and may kill adults to a lesser extent.

Two main predator-prey systems operate within Stikine Country Protected Areas: one centred in the Mount Edziza Greater Ecosystem, which includes Mount Edziza Provincial Park, the proposed Mount Edziza Protected Area, and Stikine River Provincial Park west of Highway 37; and one centred in the Spatsizi Greater Ecosystem, which includes Spatsizi Plateau Wilderness Provincial Park, Gladys Lake Ecological Reserve, Tatlatui Provincial Park, Stikine River Provincial Park east of Highway 37, Pitman River Protected Area and Chukachida Protected Area.

The Mount Edziza Greater Ecosystem, although not large enough to support self-sustaining predator populations, appears to support annual habitat and life cycle requirements for caribou, Stone's sheep and mountain goat. Those ungulates appear to exist in a mainly "closed" system where immigration and emigration is low. The moose population, however, is likely dependent on a larger area and is contiguous with other moose populations. The diversity of ungulate species in a relatively closed system is a significant feature of the Mount Edziza Greater Ecosystem. Because of the lack of information on large mammal predators, the status of the predator-prey ecosystem in the Mount Edziza Greater Ecosystem is unknown.

Figure 7. Moose, Spatsizi Plateau Wilderness Provincial Park

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal.htm

The protected areas within the larger Spatsizi Greater Ecosystem are more capable of supporting a naturally functioning predator-prey ecosystem; however, combined, they still may not be large enough to support a self-sustaining population of grizzly bear or wolf. The Spatsizi Greater Ecosystem appears to meet the majority of habitat and life cycle requirements for all the other species. Although little information exists about the large mammal predators in the Spatsizi Greater Ecosystem, minimal human disturbance and development and low levels of hunting suggest that the predator-prey system is likely functioning in a near natural state.

The dynamics of such diverse predator-prey ecosystems are complex. Fluctuations in the numbers of each species can either directly or indirectly affect population numbers of other species in the system. Generally, in ecosystems where predators live, prey populations survive at lower numbers than would be the case if predators were absent and food availability limited prey populations. In the Stikine Country Protected Areas System, predators are the most important factor regulating ungulate population size. Historical prey population fluctuations and distribution, and management efforts have played a significant role in the current structure of species numbers and distribution. Two of the most significant events contributing to changes in wildlife populations in the recent past include the expansion of moose into northwestern British Columbia in the late 1800s (with a subsequent increase in wolf numbers by the late 1930s), and a large scale wolf poisoning program conducted in British Columbia from 1949 to 1962. Ungulate populations increased following wolf control until about 1968 then declined again in the 1970s.

Coincident with moose expansion into British Columbia has been a reduction in numbers and range of caribou in southern British Columbia. Caribou used to occupy much of the interior portion of the southern half of British Columbia. Now, however, only isolated populations of caribou exist in west central British Columbia and the mountainous areas of southeastern British Columbia. A similar dramatic reduction in caribou numbers and range does not appear to have occurred in northern British Columbia, including Stikine Country Protected Areas. Therefore, the Stikine Country Protected Areas System is provincially significant in contributing to woodland caribou conservation in British Columbia. Recently, the Cassiar Iskut-Stikine LRMP added significant areas of caribou winter range north of the Stikine River to Stikine River Provincial Park.

The Stikine Country Protected Areas System is the largest contiguous protected areas system supporting the diverse caribou/moose/Stone's sheep/mountain goat/wolf/grizzly bear/black bear predator-prey system in British Columbia. These landscapes are internationally significant, providing representation of a large mammal predator-prey system in the British Columbia protected area system that ranks it as among the most important in the world.

8.5.1.1 General Management Direction

Overall Direction

The priority for wildlife management in Stikine Country Protected Areas is to maintain healthy and viable representative large-mammal predator-prey systems, allowing for natural fluctuations in wildlife populations. Two large mammal predator-prey systems are recognized within Stikine Country Protected Areas: one centred in the Spatsizi Greater Ecosystem; and one centred in the Mount Edziza Greater Ecosystem.

Objectives and Strategies

To maintain naturally occurring, healthy and viable large mammal predator-prey systems in Stikine Country Protected Areas.

- Manage the caribou/Stone's sheep/mountain goat/moose/wolf/grizzly bear/black bear populations in protected areas in the Mount Edziza Greater Ecosystem (Mount Edziza Provincial Park, Mount Edziza Protected Area (proposed) and Stikine River Provincial Park – west of Highway 37) as the Mount Edziza predator-prey system, recognizing the connectivity and linkage between this area and the Spatsizi Greater Ecosystem, and the relatively "closed" nature of the caribou, Stone's sheep and mountain goat populations.
- Manage the caribou/Stone's sheep/mountain goat/moose/wolf/grizzly bear/black bear populations in protected areas within the Spatsizi Greater Ecosystem (Spatsizi Plateau Wilderness Provincial Park, Gladys Lake Ecological Reserve, Stikine River Provincial

Park – east of Highway 37, Chukachida Protected Area, Pitman River Protected Area, and Tatlatui Provincial Park) as the Spatsizi predator-prey system, recognizing the more "open" nature of most large mammal populations.

- Work with First Nations, other agencies and the public to minimize the impacts of activities outside protected areas on the large mammal predator-prey system centred in protected areas within the Mount Edziza Greater Ecosystem and the Spatsizi Greater Ecosystem.
- Allow natural fluctuations in large mammal populations to occur as part of healthy and dynamic predator-prey systems.
- Develop and provide information on the significance and functioning of the two Stikine Country Protected Areas' predator-prey systems to visitors.

8.5.2 Habitat Management

Although habitat and food do not regulate prey populations where predators exist, they are basic requirements and must be available in sufficient quantity. Habitat requirements for each prey species are a function of food preferences, environmental conditions and predator avoidance tactics. Both mountain goat and Stone's sheep avoid predators by escaping into precipitous terrain (e.g. cliffs, rocky slopes) where they are far more agile than the predators. Their foraging areas are therefore restricted to areas close to escape terrain. Moose and caribou avoid predators by running and to a lesser degree by defending themselves and thus select habitats based more on food preferences and environmental conditions. Caribou also avoid predators by maintaining distance from other prey and predators, especially during calving.

Detailed information on wildlife habitat is lacking for Stikine Country Protected Areas. Currently, habitat capability maps are available only at a 1:250,000 scale and general areas of aggregation defined from surveys and studies of radio-collared animals.

8.5.2.1 Caribou

Woodland caribou that live in Stikine Country Protected Areas have been recently blue-listed by the British Columbia Conservation Data Centre, and designated as "Special Concern" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Stikine Country Protected Areas protect a significant part of the region's caribou habitat. During winter, caribou in these areas feed primarily by digging through the snow to obtain terrestrial lichens either on lower elevation forested plateaus or at high elevations on windswept alpine slopes. Winter feeding strategy varies between years and between winter months depending on snow conditions. Caribou also feed on arboreal lichens during winter although the extent of arboreal lichen feeding varies with snow conditions. In spring, female caribou may travel extensive distances to calving areas. Cows calve in early June in all habitat types but many caribou calve at high elevations, forgoing nutritious forage at low elevations to avoid predation on their calves. Usually only one calf is produced. During summer, caribou use a variety of habitats and feed on emerging vegetation. In the fall, most of the caribou populations move into alpine and subalpine habitat to rut although rutting also occurs below treeline.

Two main populations of caribou live within Stikine Country Protected Areas: the Spatsizi population, which consists of about 700 caribou, and the Mount Edziza population, which consists of about 100 caribou. The Spatsizi caribou population range is located in the Spatsizi Greater Ecosystem, which includes Spatsizi Plateau Wilderness Provincial Park, Gladys Lake

Ecological Reserve, Stikine River Provincial Park east of Highway 37, Pitman River Protected Area, Chukachida Protected Area and Tatlatui Provincial Park. Caribou range throughout the Spatsizi Greater Ecosystem in summer. Major wintering areas include mature pine forests along the Stikine River between the McBride and Pitman rivers, and along the lower Spatsizi River. During some winters caribou extensively use windswept alpine slopes mostly on the Spatsizi Plateau, between the Ross and Spatsizi rivers, and in the Eaglenest Range and Gladys Lake Ecological Reserve north of Mount Will. Important rutting areas include the Spatsizi Plateau, the Tomias Mountain Plateau and Edozadelly Mountain. Caribou live in Tatlatui Provincial Park primarily during spring, summer and fall and are mostly absent from the park in winter because of the deep snow pack.

The Mount Edziza caribou population inhabits the Mount Edziza Greater Ecosystem, spending summer throughout Mount Edziza Provincial Park with some rutting aggregations occurring on the plateau west of Mount Edziza Peak. During winter, caribou sign is found below treeline in the Buckley Lake area; however little information is available on winter distribution of caribou. During some winters caribou may be found on the plateau. The Cassiar Iskut-Stikine LRMP recommended forest harvesting in management zones adjacent to Mount Edziza Provincial Park; caribou winter habitat quality and use in those areas remains unknown.

Figure 8. Caribou, Mount Edziza Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal2.htm

8.5.2.2 Stone's Sheep

Stone's sheep live throughout Stikine Country Protected Areas, except the lower elevation portions of Stikine River Provincial Park, Pitman River Protected Area and Chukachida Protected Area. Stone's sheep are generally associated with steep slopes, grassy knolls and adjacent cliffs for escape terrain. During winter, Stone's sheep primarily use south or west facing alpine and subalpine slopes where snow accumulations are low and where they can forage on grasses, sedges and other ground vegetation. For the snow free part of the year, Stone's sheep may use a wider variety of habitats that are close to escape terrain. For most of the year, rams and ewes generally occupy separate ranges except during the rut in November and December. Lambs (usually one) are born in late May and early June.

In the Spatsizi Plateau Wilderness Provincial Park area, Stone's sheep primarily inhabit the northern part of the Eaglenest Mountains, the Gladys Lake Ecological Reserve and the Spatsizi Plateau along Marion Creek and the south facing slopes near Hyland Post. Some small bands of Stone's sheep exist south of the Spatsizi River west of the Dawson River, east of the Ross River, and in the Duti River area at the southeast end of the park; however status of those bands is difficult to assess because of the low numbers observed. Tatlatui Provincial Park is home to scattered small bands of Stone's sheep but numbers are likely limited by habitat availability and winter snow accumulation.

In Stikine River Provincial Park, Stone's sheep inhabit primarily the north side of the river in the mountains between Beggerlay Creek and the Kehlechoa River. Stone's sheep live throughout Mount Edziza Provincial Park with the greatest concentrations along the south and west facing cliffs on the west side of the plateau.

8.5.2.3 Mountain Goat

Like Stone's sheep, mountain goats exist throughout Stikine Country Protected Areas except for the low elevation portions of Pitman River Protected Area and Chukachida Protected Area. Mountain goats inhabit Spatsizi Plateau Wilderness Provincial Park, Gladys Lake Ecological Reserve, Tatlatui Provincial Park, and Mount Edziza Provincial Park in association with precipitous slopes and cliffs. In Stikine River Provincial Park, mountain goat habitat is limited and mountain goats live mainly along the Stikine River Canyon and in the mountains between Beggerlay Creek and the Kehlechoa River.

Mountain goats are highly agile climbers and forage in habitats close to precipitous slopes and cliffs that they use for escape terrain. They inhabit terrain similar to but often steeper and more precipitous than Stone's sheep. Mountain goats are more restricted than Stone's sheep in their movements away from escape terrain but forage on a wider variety of vegetation including grasses, forbs, shrubs and subalpine fir. During winter, mountain goats must often forage on vegetation immediately adjacent to escape terrain, which may be limited to subalpine fir. Like Stone's sheep, mountain goats prefer south facing slopes with low snow accumulations in winter but are also found on all aspects and in deep snow areas. Mountain goats use a wider variety of habitats in the summer when movements are less restricted by snow but still rely on cliffs for escape terrain. Kids are born in late May and nannies may produce one or two and occasionally three kids.

Figure 9 – Mountain goat

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal2.htm

8.5.2.4 Moose

Moose are found throughout all Stikine Country Protected Areas. During winter, moose typically inhabit low elevation valley bottoms feeding primarily on shrubs, grasses and sedges in forested and wetland habitats, but also inhabit mid-elevations and subalpine habitat. In spring, female moose may move considerable distances to calving areas mostly below treeline although some cows also calve in subalpine habitats. Calving occurs in late May to early June and females may give birth to one or two calves. During summer, moose are found in all habitat types but mostly those below treeline and in the fall they favour upland scrub and subalpine habitat.

High quality moose habitat occurs in most Stikine Country Protected Areas. Significant wetland habitat along the Chukachida and Pitman rivers, and old burns near Hyland Post and along the Stikine River (both east and west of Highway 37), provide high quality moose winter habitat. Although little information is available for Tatlatui Provincial Park, moose primarily use the park for summer range because of deep winter snow accumulation.

8.5.2.5 Grizzly Bear

Grizzly bears in British Columbia are blue-listed by the British Columbia Conservation Data Centre. In 1995, the provincial government developed a Grizzly Bear Conservation Strategy that included implementing Limited Entry Hunting for all hunted grizzly bear populations, developing Grizzly Bear Management Areas, and initiating a Grizzly Bear Scientific Panel to review grizzly bear management in British Columbia (British Columbia Ministry of Environment, Lands and Parks 1995). The Grizzly Bear Scientific Panel recently released their final report, which includes a number of recommendations such as refining methods for estimating grizzly bear numbers, addressing access issues, and implementing the provision in the Grizzly Bear Conservation Strategy to establish Grizzly Bear Management Areas in each bioclimatic region in the province (Peek *et al*. 2003).

Grizzly bears and grizzly bear habitat exist throughout all Stikine Country Protected Areas. The highest quality habitat occurs along valley bottoms on the Stikine, Spatsizi, Chukachida, Pitman and Klappan rivers. Other than some research conducted by the Spatsizi Association for Biological Research, little information is available on grizzly bear in Stikine Country Protected Areas.

In general, bears feed on emerging vegetation during spring, especially on avalanche chutes. During summer, bears continue to feed on emerging and growing vegetation and then on berries later in the summer and fall. Throughout the year bears may supplement their diet by feeding on carrion, hunting marmots and ground squirrels in the alpine and hunting larger wildlife. In some areas, grizzly bears are significant predators of newborn ungulates. Grizzly bears with access to salmon spawning streams feed on salmon in late summer and fall. In the Stikine Country Protected Areas region, the Stikine River Canyon prevents the movement of salmon upstream so only grizzly bears in the Mount Edziza Provincial Park area potentially have access to salmon streams.

8.5.2.6 Other Wildlife Species

Wolves live throughout all Stikine Country Protected Areas and are an important predator in th Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem, feeding on moose, caribou, Stone's sheep, mountain goat and other smaller mammals. Prey abundance and social behaviour (i.e. wolf packs, territories) naturally regulate wolf numbers. Wolves patrol and defend territories thereby limiting the number of wolves in an area. Because of the diversity of ungulates and small mammals in Stikine Country Protected Areas, population fluctuations of individual prey species may have little impact on wolf numbers as wolves switch to other prey when one prey species declines. Research by the Spatsizi Association for Biological Research on radio-collared wolves in the Spatsizi Plateau Wilderness Provincial Park area indicated that one wolf pack territory was centred in the Spatsizi Plateau area and another in the Eaglenest Range. Although moose were abundant in valley bottoms, it appeared that those two wolf packs primarily hunted caribou and Stone's sheep.

Mule deer are near their northern range limit and are found primarily in small bands along the Klastline River, along the Spatsizi River near Hyland Post and scattered on south facing slopes along the Stikine River mostly west of Highway 37. Winter snow accumulation primarily limits the distribution of mule deer in the area.

All medium to large predators (e.g. black bear, wolverine, coyote, lynx [*Lynx canadensis*], red fox [*Vulpes vulpes*], fisher, river otter [*Lontra americanus*], mink [*Mustela vison*], marten [*Martes americana*]) and smaller mustelids (short-tailed weasel [*Mustela erminea*], least weasel [*Mustela nivalis*]) are expected to occur in all Stikine Country Protected Areas.

Snowshoe hare (*Lepus americanus*), porcupine (*Erethizon dorsatum*), beaver (*Castor canadensis*), hoary marmot (*Marmota caligata*), muskrat (*Odantra zibethica*), bushy-tailed wood rat (*Neotoma cinerea*), red squirrel (*Tamiasciurus hudsonicus*) and least chipmunk (*Eutamias minimus*) all occupy habitats throughout the Stikine Country Protected Areas System. Records confirm the occurrence of some mice, voles, shrews, bats and amphibians but little information is available on those animals (Appendix 7).

Pikas (*Ochotona* sp.) and melanistic chipmunks were reported on the south slope of Melanistic Peak and at the west end of Tatlatui Lake in Tatlatui Provincial Park, and a pika call was heard in a rockslide above Trygve Lake. Although pikas exist in the southern half of British Columbia and in the Yukon, they are not known to occur in the northern part of the province. Therefore, verification of the observations in Tatlatui Provincial Park will result in changes in known distribution of pikas in British Columbia.

In the combined Stikine Country Protected Areas, confirmed sightings of 170 species and unconfirmed sightings of two species of birds have been reported (Appendix 7). Little information exists about amphibians and invertebrate animals in Stikine Country Protected Areas.

8.5.2.7 Prescribed Burning

The Skeena Region Fish and Wildlife Branch carried out a series of small prescribed burns in Stikine Country Protected Areas between 1986 and 1991 as part of a larger Stone's sheep habitat enhancement program. The objective of the burns was to reduce shrub and young forest growth to re-establish more Stone's sheep habitat. Burns could also benefit other wildlife; lower elevation areas within the burns were expected to be especially beneficial for moose. The Fish and Wildlife Branch conducted seven burns within the six-year period. The largest and most successful burn took place along the McBride River in what is now Stikine River Provincial Park. In Mount Edziza Provincial Park, 150 hectares were burned along the Klastline River in

1990 and a further 672 hectares were burned the following year to increase the size of the burned area.

A prescribed burn for Stone's sheep habitat was proposed for the old burn area at Hyland Post for the spring of 1999; however, unfavourable conditions prevented any burning. Another burn was conducted in June 2000 when over 11,000 hectares burned during an attempt to create a firebreak; however, most of the burned area lay outside of the targeted area. Since pre and post-burn monitoring plots were established in the targeted area, none of those plots burned during the June 2000 fire.

8.5.2.8 General Management Direction

Overall Direction

Vegetation in the Stikine Country Protected Areas System exists in a largely natural state; therefore, natural disturbances will be the main processes driving wildlife habitat dynamics. Habitat management for individual species will be secondary to management of an overall natural wildlife habitat mosaic. Acquiring more information on distribution and quality of wildlife habitat throughout the system is a high priority.

Objectives and Strategies

To manage wildlife habitat as part of a natural vegetation mosaic driven by natural disturbances.

- Allow natural disturbance processes to be the primary driver of wildlife habitat dynamics.
- Consider habitat manipulation for:
  - wildlife populations or portions of populations that are significantly declining because of deteriorating habitat conditions resulting from human disturbance or intervention;
  - species that are at risk or sensitive species if populations are threatened; or,
  - local populations that are at risk of becoming extirpated, or that are in marked decline (i.e. >50% population decline).

  Habitat manipulation will not be considered for the primary purpose of maintaining or enhancing wildlife populations for recreation purposes such as hunting or wildlife viewing. Habitat manipulation will be conducted using only tools based on natural disturbances (e.g. fire). Consider whether outdoor recreation activities (consumptive and/or non-consumptive) should be removed in the area where habitat manipulation is conducted, until the population has recovered.
- Monitor and report on the effectiveness of any habitat manipulation activities.
- Monitor natural disturbances and evaluate recent disturbances for wildlife habitat value and use.

To identify significant wildlife habitat.

- Delineate known ungulate winter and summer ranges based on research conducted by the Spatsizi Association of Biological Research on radio-collared animals, and on inventories.
- Conduct wildlife habitat capability and suitability mapping at 1:50,000 or 1:100,000 scale for protected areas in the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem for caribou, Stone's sheep, mountain goat, moose, grizzly bear and species at risk.

- Use the wildlife habitat map to determine overall wildlife habitat condition and to identify critical or sensitive habitat.
- Identify known areas of important habitat outside protected area boundaries.

To protect critical or sensitive habitat from human disturbance.
- Encourage visitors and commercial operators to avoid areas of known critical or sensitive habitat. If necessary, limit access to those areas.
- Provide visitors and commercial operators with information on the significance of critical or sensitive habitat and impacts caused by human disturbance.

To protect habitat for species at risk from human disturbance.
- Encourage visitors and commercial operators to avoid areas of known habitat for species at risk. If necessary, limit access to those areas.
- Provide visitors and commercial operators with information on the significance of species at risk and their habitat and impacts caused by human disturbance.

To maintain important caribou ranges to contribute to conservation of caribou in British Columbia.
- Delineate known caribou winter range and identify winter range characteristics based on existing information.
- Establish and monitor long-term monitoring plots to investigate terrestrial lichen availability and dynamics in the caribou winter range along the Stikine River.
- Monitor the effects of natural disturbances on caribou winter habitat.
- Identify known summer ranges of the Mount Edziza caribou population based on existing information.
- Conduct a study using radio-collars for caribou in Mount Edziza Provincial Park to determine winter habitat use and important wintering areas.

To incorporate First Nations traditional knowledge in wildlife habitat management.
- Work with First Nations to identify historical and currently used important habitats and migration routes.
- Identify and assess traditional habitat management activities.

8.5.2.9 Protected Area-Specific Management Direction

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To monitor the Hyland Post burn.
- Establish long-term vegetation monitoring plots at the recent Hyland Post burn to monitor wildlife habitat quality.
- Conduct surveys of Stone's sheep in the Marion Wildlife Inventory Zone to determine effects of the burn on lamb recruitment and population numbers.
- Consider conducting a prescribed burn near Hyland Post, to fulfil management objectives of the original prescribed burn, subject to consultation with the Tahltan Nation and affected stakeholders.

8.5.3 Population management

Population information for large mammals is often costly and difficult to obtain. Population estimates for Stone's sheep, mountain goat and caribou are based on surveys conducted in non-forested (usually alpine) habitat. For other species, population estimates are more difficult to obtain. Biologists use stratified random block surveys to estimate moose numbers, and in British Columbia, government estimates of grizzly bear numbers in most areas are inferred based on habitat capability and disturbance factors.

For Stikine Country Protected Areas, biologists conducted large mammal inventories irregularly during the last 20 years. Because of the area's vast size and difficulty in counting some species, few recent reliable population estimates are available. The most recent counts include a mountain goat and Stone's sheep survey in the Mount Edziza Provincial Park area in 1996, and Stone's sheep and caribou surveys in the Spatsizi Plateau Wilderness Provincial Park area (Spatsizi Plateau Wilderness Provincial Park, Stikine River Provincial Park, Gladys Lake Ecological Reserve) in 1993 and 1994 (Table 3). For most species, population estimates are over 10 years old. A wildlife survey for Stone's sheep was conducted in March 2003 in the Spatsizi Plateau Wilderness Provincial Park area along with incidental inventories of mountain goats and caribou.

In the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem, the protected areas and adjacent areas are divided into Wildlife Inventory Zones for inventory purposes. Some species inhabit only portions of those protected areas during different seasons. Therefore, wildlife inventory zones are useful in reporting general distribution patterns and changes in population numbers at a more geographically specific level than at the protected area or ecosystem level. Some zones include areas outside of the protected areas within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem to incorporate biologically based boundaries.

Although surveys can provide population estimates for wildlife species, population status and trends (e.g. whether populations are increasing or decreasing) are more difficult to assess. Biologists can use juvenile recruitment to infer population status for the year of the survey. Most of the surveys suggest that juvenile recruitment is likely adequate to compensate for adult mortality; therefore, most of the populations were likely at least stable at the time of the survey. Comparing population estimates from successive surveys can also be used to infer population trends. However, few of the populations have more than one or two reliable population estimates, making it difficult to assess trends. Of particular concern is the lack of current reliable inventory information.

For Mount Edziza Provincial Park, the last caribou survey was conducted in October 1983 when 66 caribou were counted in rutting groups on the west side of the park. Calf recruitment appeared to be low; however, low calf recruitment may have been a function of the small sample size. Attempts to conduct caribou population surveys since 1983 have been unsuccessful because of the lack of caribou in alpine habitat during the surveys. Anecdotal observations in 1996 suggest that the population may have increased since 1983 and incidental observations during a caribou capture in November 2002 reported about 70 animals. However, because of the lack of current inventory information, the status of the Mount Edziza caribou population is unknown.

Table 3. Population Status of Wildlife in Stikine Country Protected Areas.

	Mount Edziza Provincial Park	Mount Edziza Protected Area (proposed)	Mount Edziza RMZ[1]	Stikine River Provincial Park West	Stikine River Provincial Park East	Pitman River Protected Area	Chukachida Protected Area	Spatsizi Plateau Wilderness Provincial Park	Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Caribou										
Survey year	October 1983			No data	March 1994					
Number observed	66				2145					
Population estimate					2681					
Calf recruitment (% calves)	10.6				15.8					
Stone's sheep										
Survey year	March 1996			Mostly absent	March 1994	No data	No data	March 1994		July 1985
Number observed	136				74			479		19
Population estimate	170				92			599		
Lamb recruitment (% lambs)	16.2				6.8			16.5		26.3
Mountain goats										
Survey year	March 1996			September 1979	No data	No data	No data	July 1984 and 1985		July 1989
Number observed	168			255				630		320
Population estimate	210			316						
Kid recruitment (% kids)	15.5			18.4				24.8		27.5
Moose										
Survey year	No data				February 1990					No data
Number observed										
Population estimate					1912					
Calf recruitment (% calves)					17.6					

[1] Mount Edziza Resource Management Zone

Stone's sheep surveys in Spatsizi Plateau Wilderness Provincial Park in March 1993 and 1994 yielded a population estimate of 599 Stone's sheep, which was similar to the 1988 survey suggesting that the population is stable; however, distribution of Stone's sheep was slightly different between the two surveys. The population at Marion Creek and Hyland Post is considered somewhat isolated from the larger population in the Eaglenest Range. The number of Stone's sheep counted during surveys in the Marion Creek and Hyland Post area decreased from 125 Stone's sheep in 1988 to 63 Stone's sheep in 1999 indicating a decline.

Figure 10. Stone's sheep, Mount Edziza Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal2.htm

The number of Stone's sheep counted in Tatlatui Provincial Park in 1985 is likely not a good indicator of the actual population size since scientists counted Stone's sheep incidentally during a mountain goat survey. Stone's sheep numbers in Tatlatui Provincial Park are likely limited by habitat availability and winter snow accumulation.

Stone's sheep numbers reported for Stikine River Provincial Park (east of Highway 37) include only the Mount Sister Mary and McBride areas. Sheep remain unsurveyed in the northern addition to Stikine River Provincial Park.

Although wildlife scientists have conducted few recent surveys for mountain goats in Stikine Country Protected Areas, population numbers and kid recruitment from those surveys appeared adequate for maintenance of at least stable populations in most of the protected areas. However, the most recent adequate survey of mountain goats in the Stikine River Canyon conducted by scientists in September 1979 yielded an estimate of 316 mountain goats. A few surveys have been attempted in the area since then (as recently as March 1996); however, low numbers observed during those flights were believed to be a function of poor viewing conditions.

Two areas in Stikine Country Protected Areas were surveyed for moose using the stratified random block moose survey method. The surveys were conducted in the Level Mountain area in February 1988 and 1990 and in Spatsizi Plateau Wilderness Provincial Park and Stikine River Provincial Park east of Highway 37 in February 1990. Although the Level Mountain survey was conducted north of the Stikine River, the 1990 density estimate of 470 moose/1000 km^2 is a good indicator of moose density for the northern portion of Mount Edziza Provincial Park and Stikine River Provincial Park west of Highway 37. The Spatsizi Plateau Wilderness Provincial Park survey included wintering areas in Gladys Lake Ecological Reserve, Spatsizi Plateau Wilderness Provincial Park, Stikine River Provincial Park east of Highway 37, Pitman River Protected Area and Chukachida Protected Area. The population for the area was estimated at 1912 ± 292 moose with a density of 558 moose/1000 km^2, slightly higher than the density estimate for the Level Mountain area. Calf recruitment levels in both surveys suggest that calf recruitment is adequate to compensate for adult mortality. Results from the radio-collared moose study conducted by the Spatsizi Association for Biological Research for 1990 and 1991 also suggested that calf recruitment was adequate to compensate for adult mortality. The bull to cow ratios (Spatsizi: 69 bulls/100 cows; Level Mountain: 68 bulls/ 100 cows) indicate a high proportion of bulls in the population.

Although no direct inventories of grizzly bears exist for Stikine Country Protected Areas, the Wildlife Branch developed a method of estimating grizzly bear numbers based on habitat capability and human developments and disturbance. Wildlife Branch estimated grizzly bear numbers based on habitat capability (Fuhr and Demarchi 1990) then reduced the numbers based on degree of habitat alteration, disturbance, and human caused mortalities. Park specific estimates were derived in 1999 for Spatsizi Plateau Wilderness Provincial Park, Gladys Lake Ecological Reserve and the former Stikine River Recreation Area east of Highway 37 combined (113 bears), for Mount Edziza Provincial Park and the proposed Mount Edziza Protected Area combined (28 bears), and for Tatlatui Provincial Park (25 bears). Stikine River Provincial Park west of Highway 37 was too small for an individual population estimate and was included in the population estimate for the Wildlife Management Unit. Actual population status of grizzly bear populations in Stikine Country Protected Areas is unknown.

Inventory information for species other than caribou, Stone's sheep, mountain goat and moose is lacking. One of the most significant inventory information gaps is wolf numbers and distribution. Other than information collected by the Spatsizi Association for Biological Research in the early 1990s on two to three radio-collared wolf packs, most observations are anecdotal and are insufficient to draw conclusions about wolf packs, numbers and dynamics.

8.5.3.1 Research, Inventory and Monitoring

The Stikine Country Protected Areas System was the focus of several wildlife inventories and research studies since the 1960s including:

- research on Stone's sheep behaviour in the Gladys Lake area in the 1960s;
- wildlife surveys upstream of Telegraph Creek along the Stikine River in the late 1970s and early 1980s for the proposed Stikine-Iskut Hydroelectric Project;
- extensive ground surveys in Spatsizi Plateau Wilderness Provincial Park and Tatlatui Provincial Park in 1975;
- research in the Spatsizi area on caribou habitat use, behaviour and population dynamics from 1980 to 1987 and on moose, wolf and grizzly bear habitat use, behaviour and

population dynamics from 1990 to 1993 by the Spatsizi Association for Biological Research (SABR);

- research on early caribou calf mortality and caribou rutting behaviour in the Spatsizi area in the late 1970s and early 1980s; and,
- numerous caribou and Stone's sheep inventories in the Spatsizi Plateau Wilderness Provincial Park area and in Mount Edziza Provincial Park in the 1970s and 1980s.

However, since the late 1980s, few wildlife inventories have been conducted in Stikine Country Protected Areas. In addition to research and inventory activities conducted on wildlife in Stikine Country Protected Areas, comprehensive information on wildlife harvests is also available. Environmental Stewardship Division maintains a database containing wildlife harvest information based on annual hunting guide returns, compulsory inspection reports and resident hunter surveys; hunting guide returns have been submitted since 1948.

Figure 11. Wolf capture for research conducted by the Spatsizi Association for Biological Research.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal2.htm

Standards for conducting wildlife inventories in British Columbia have been developed by the Resource Inventory Standards Committee (RISC, formerly Resources Inventory Committee) during recent years.

8.5.3.2 Hunting

Hunting of wildlife has been an important sustenance activity for First Nations people in the Stikine Country Protected Areas region. Within the last 100 years hunting has become a significant activity for both British Columbia resident hunters and non-resident hunters. In the Ministry of Water, Land and Air Protection, Skeena Region, hunting opportunities are available on 92% of the protected area land base. Resident and non-resident hunters must comply with hunting regulations and a guide must accompany non-resident hunters. Little information is available on current levels of First Nations harvest in the area; however, reliable resident and non-resident harvest data are available from 1975 to the present.

The *Ecological Reserve Act* prohibits hunting in Gladys Lake Ecological Reserve; otherwise, hunting occurs in all other Stikine Country Protected Areas. Some protected areas or portions of some protected areas are closed to hunting of certain wildlife species. Mule deer hunting is closed in the Stikine Country Protected Areas region. Mount Edziza Provincial Park, the proposed Mount Edziza Protected Area, and the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) are closed to caribou hunting and Tatlatui Provincial Park is closed to Stone's sheep hunting, because of low population numbers in both areas. A portion of Spatsizi Plateau Wilderness Provincial Park is closed to mountain goat hunting because of the low number of mountain goats in that area.

Hunting regulations and guide-quotas for individual protected areas within the Stikine Country Protected Areas region are rather complicated because of the intersection of several guide-outfitter territories and Wildlife Management Units within protected area boundaries (Appendix 8). Stikine River Provincial Park (as defined by the former Stikine Recreation Area) is divided into two units: East (east of Highway 37; Spatsizi Greater Ecosystem) and West (west of Highway 37; Mount Edziza Greater Ecosystem) based on Management Unit boundaries. East of the highway the Stikine River Recreation Area (both the MU6-19 and 6-20 portions) was combined with Spatsizi Plateau Wilderness Provincial Park (wholly within MU6-20) to create MU6-20A and is currently managed as one unit. For MU6-20A all major species (Stone's sheep, mountain goat, caribou, moose and grizzly bear) are under Limited Entry Hunting regulations and protected area-specific guide quotas. For all other protected areas, there is a mix of Limited Entry Hunting and open seasons as well as a mix of protected area-specific guide quotas, territory specific guide quotas and no guide quotas.

New protected areas and additions including Mess Creek and Klastline additions to Mount Edziza Provincial Park; northern additions to Stikine River Recreation Area East; Metsantan addition to Spatsizi Plateau Wilderness Provincial Park; Pitman River Protected Area; and Chukachida Protected Area are currently not included in park zones within Wildlife Management Units. Mess Creek and Klastline both fall within MU6-21 and each falls entirely within one guide territory. Pitman River Protected Area falls entirely within MU6-19 and one guide territory and Metsantan falls entirely within MU6-20 and one guide territory. Chukachida Protected Area lies entirely within one guide territory but within two MUs (6-19, 6-20). The northern addition to the Stikine River Recreation Area lies within MU6-19 and one guide territory. Currently the general hunting regulations for those management units and territory wide guide quotas apply to those new protected areas.

Hunting is managed within parks and protected areas for quality outdoor recreation opportunities rather than to maximize harvests. Both resident and non-resident average annual harvests appear to be within limits; however, further work is required to update the average annual harvest data and to reconcile inconsistencies with protected area-specific guide-outfitter quotas, because of the new additions to the Stikine Country Protected Areas system. The current lack of inventories for hunted wildlife populations warrants a continued conservative approach to managing wildlife harvests in Stikine Country Protected Areas.

Figure 12. Hunting party, Spatsizi Plateau Wilderness Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal2.htm

As hunting is one of many outdoor recreation activities offered in the Stikine Country Protected Areas System, to ensure the maintenance of wildlife populations in protected areas at a long-term viable level, harvest rates within the system are more conservative and, therefore, lower than harvest rates on adjacent lands. This policy provides several benefits to both biodiversity and outdoor recreation objectives. Biodiversity benefits include:

- wildlife population numbers are maintained closer to natural population levels and, therefore, can act as wildlife research areas;
- wildlife populations act as core populations for adjacent lands; and,
- wildlife populations act as gene banks for adjacent populations.

Outdoor recreation benefits include:

- special, high quality wilderness hunting experiences provided in naturally scenic areas;
- non-mechanized ground access to most of the Stikine Country Protected Areas System provides a special quality hunting experience;
- larger wildlife populations in protected areas may afford hunters a greater chance of hunting success and a greater chance of finding trophy animals; and,
- wildlife populations in protected areas provide excellent opportunities for wildlife viewing, education and appreciation values.

To ensure management of wildlife populations in Stikine Country Protected Areas is based on science-based decision making, monitoring of both harvest levels and wildlife populations levels is required. BC Parks' policy requires that inventories of hunted populations be conducted a minimum of once every five years to determine population levels. Following inventories, biologists review and adjust harvest levels in consideration of conservation objectives, First Nations harvests and outdoor recreation requirements. Harvest levels are managed to maintain the biodiversity and recreation benefits described above.

8.5.3.3 Trapping

Trapping is an important subsistence and/or commercial activity for First Nations and non-First Nations trappers. Portions or all of 15 traplines lie within Stikine Country Protected Areas although only two are presently considered active. Regulations follow the general regional trapping regulations. Currently little information exists about protected area-specific trapping harvests.

8.5.3.4 Predator Management

Predator management is a controversial wildlife management issue. BC Parks Conservation Program Policies (1997) allows for predator management only if a prey population is threatened, and not for consumptive purposes.

- *Natural processes such as wildfire, succession, or predation will prevail unless they threaten the existence of a species or critical habitat that has been identified for conservation.*
- *Artificial enhancement of all wildlife populations for consumptive purposes within parks will not be permitted unless specifically stated in an approved management plan. It is not permitted at any time in ecological reserves.*

Artificial enhancement could include habitat manipulation or predator management.

8.5.3.5 General Management Direction

Overall Direction

The priority of wildlife population management in the Stikine Country Protected Areas System is to maintain viable populations of all large mammal species while allowing for natural population fluctuations. Accurate monitoring of wildlife population numbers is a priority for ensuring viability of populations. First Nations traditional activities such as hunting and trapping are an important component of the wildlife system. Non-First Nations hunting and guided hunting will continue to be managed more conservatively than in adjacent areas. Trapping will continue as a commercial activity.

Objectives and Strategies

To manage the main wildlife populations in Stikine Country Protected Areas to allow natural processes to continue.

- Manage large mammal populations (i.e. caribou, Stone's sheep, mountain goat, moose, grizzly bear) based on reliable population inventory and other scientific information.
- Consider artificial enhancement of wildlife populations, such as habitat manipulation or predator management, for: wildlife populations or portions of populations that are significantly declining because of human disturbance or intervention; or local populations that are at risk of becoming extirpated or that are in marked decline (i.e. >50% of baseline population). Artificial enhancement efforts for wildlife populations will not be considered for the primary purpose of maintaining or enhancing wildlife populations for outdoor

recreation purposes such as hunting or wildlife viewing. Consider whether outdoor recreation activities (consumptive and/or non-consumptive) should be removed in the area where artificial enhancement is conducted, until the population has recovered.

To monitor and report on the population status (condition and trend) of the main large mammal species (i.e. caribou, Stone's sheep, mountain goat, moose, grizzly bear, black bear, wolf) in the Stikine Country Protected Areas System.

- Update all large mammal population estimates for caribou, Stone's sheep, mountain goat and moose within five years as funding permits.
- Conduct surveys of hunted populations of caribou, Stone's sheep, moose and mountain goats. Suggested time interval: every four to six years.
- Conduct surveys of unhunted populations of caribou, Stone's sheep, moose and mountain goats. Suggested time interval: every six to eight years.
- Develop a population monitoring strategy for wolves.
- Ensure coordination of wildlife population surveys for populations in and adjacent to the Stikine Country Protected Areas System.
- Ensure wildlife inventories are conducted based on existing Wildlife Inventory Zones and RISC standards, and are promptly written up.
- Delineate Wildlife Inventory Zones for Stikine River Provincial Park, Chukachida Protected Area, Pitman River Protected Area and additions to Mount Edziza and Spatsizi Plateau Wilderness provincial parks.
- Monitor current literature for new techniques for determining population status.

To manage small and moderate-sized wildlife species as intact viable populations.

- Allow natural fluctuations of small and moderate-sized wildlife species to continue.
- Monitor populations when conservation concerns arise.

To continue to improve the level of understanding of wildlife population dynamics in the Stikine Country Protected Areas System.

- Encourage universities and other credible research organizations to conduct research on wildlife and wildlife population dynamics in the Stikine Country Protected Areas System. Research proposals will be subject to BC Parks Impact Assessment Process and involvement of provincial government biologists.
- Investigate new sources of funding for wildlife management activities.

To maintain established First Nations hunting and trapping rights that are consistent with conservation and public safety objectives.

- Work with First Nations to develop and implement a harvest monitoring program to evaluate current First Nations harvest levels in the Stikine Country Protected Areas System.
- Work with First Nations to develop a First Nations harvest management strategy.

To provide high quality wilderness-based hunting opportunities for resident and non-resident hunters that are consistent with conservation objectives.

- Continue to follow BC Parks hunter harvest management policies to manage resident and non-resident hunting opportunities and annual allowable harvests more conservatively than outside of protected areas. Where specific BC Parks policies do not exist, follow

Fish and Wildlife Recreation and Allocation Branch policies as part of the provincial Wildlife Harvest Strategy.

- Review hunter harvests on an annual basis to ensure that they do not exceed annual allowable harvest levels.
- Ensure resident and non-resident hunting regulations and guide-outfitter quotas are managed in a coordinated and consistent manner within individual protected areas in the Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem.
- Conduct a full review of population levels and harvest rates for all species for both resident and guided hunts to ensure hunting levels are sustainable, conservation and First Nations considerations are met, and recreational hunting allocations are consistent with management objectives. This review will be conducted in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other stakeholders.
- Develop a strategy for managing wildlife hunting recreation activities that considers issues such as hunting zones, levels of harvest and consistency of regulations. This strategy will ensure that guide-outfitter quotas and LEH hunts are applied consistently between protected areas within each Greater Ecosystem and will be developed in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other stakeholders. Limited Entry Hunting and protected area guide-outfitter quotas are the preferred methods for managing hunting opportunities in Stikine Country Protected Areas.
- Consider managing hunting opportunities within the Stikine Country Protected Areas System within three zones:
  - ➢ Tatlatui Provincial Park;
  - ➢ Stikine Country Protected Areas east of Highway 37 (excluding Tatlatui Provincial Park); and,
  - ➢ Stikine Country Protected Areas west of Highway 37.
- Consider amending Management Unit zone boundaries for these three zones by:
  - ➢ amending Management Unit 6-20A to include:
    - ⇨ the new Stikine River Provincial Park boundary east of Highway 37;
    - ⇨ the Metsantan addition to Spatsizi Plateau Wilderness Provincial Park; and,
    - ⇨ Chukachida Protected Area and Pitman River Protected Area.
  - ➢ amending Management Unit 6-21A to include:
    - ⇨ the Mess Creek and Klastline additions to Mount Edziza Provincial Park; and,
    - ⇨ Stikine River Provincial Park west of Highway 37.
- Work with First Nations and the Skeena Hunter Advisory Committee on proposed revisions to hunting regulations.
- Revise hunting regulations, when necessary, to provide clear boundary definitions and to facilitate enforcement activities. Conduct these changes in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other local stakeholders.
- Provide hunting opportunities for wildlife populations where inventories demonstrate sufficient numbers of animals to sustain a harvest.
- Continue to maintain a closed season for mule deer within the Stikine Country Protected Areas System as part of larger management unit-wide regulations.

To maintain trapping opportunities that are consistent with conservation objectives.

- Manage traplines and portions of traplines that lie within Stikine Country Protected Areas as commercial operations.
- Monitor trapping harvests specific to Stikine Country Protected Areas.
- Purchase and retire traplines if they are voluntarily offered for sale. Consult with First Nations if traplines are held by First Nation individuals.

To establish baseline information on wildlife species other than large mammals.

- Investigate funding sources and partnerships for collecting baseline information on medium and small mammals, amphibians and invertebrates in the Stikine Country Protected Areas System.

8.5.3.6 Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To protect wildlife populations of known conservation concern.

- Continue the closed season for caribou in Mount Edziza Provincial Park given the lack of current inventory information and low numbers counted during the most recent inventory.
- Conduct a caribou inventory during the fall rut to determine a population estimate.

Tatlatui Provincial Park - Objectives and Strategies

To protect wildlife populations of known conservation concern.

- Continue the closed season for Stone's sheep in Tatlatui Provincial Park given the lack of current inventory information and low numbers counted during the most recent inventory.

8.5.4 Species at Risk and Unique/Sensitive Species

The British Columbia Conservation Data Centre (CDC) provides listings for species at risk in British Columbia. Species on the "Red" list are species that are designated as Threatened or Endangered under the *Wildlife Act*, are candidates for this designation, or are extirpated but were once part of the natural fauna of British Columbia. Species on the "Blue" list are candidates for the Red List in the foreseeable future, are generally suspected to be vulnerable due to limited information and/or are in need of special management to ensure their survival.

Four blue-listed mammal species (i.e. caribou, grizzly bear, wolverine and fisher) occur within Stikine Country Protected Areas. All four species require large relatively undisturbed home ranges. For fisher and wolverine, the combined size of the contiguous Stikine Country Protected Areas is likely sufficient to maintain viable populations, especially for the protected areas east of Highway 37. For caribou, the Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem are believed to contain most life history and seasonal habitat requirements for the Spatsizi and Mount Edziza caribou populations respectively. One major information gap is wintering areas of the Mount Edziza caribou population. For grizzly bears, the Stikine Country Protected Areas System provides a large area of protected range, which functions as a "core" area for maintaining a viable population over a larger area.

Eleven red, blue and yellow-listed bird species have been recorded in Stikine Country Protected Areas (Table 4). Long-tailed ducks (*Clangula hyemalis*, previously known as Oldsquaw) and upland sandpipers (*Bartramia longicauda*) are recorded as migrants whereas all other species are either known or suspected to breed within the protected areas.

Figure 13. Grizzly bear, blue-listed by the BC Conservation Data Centre.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal2.htm

The "northern" ecotype of woodland caribou in British Columbia (Northern Caribou), which live in the Stikine Country Protected Areas, were blue-listed (S3S4) by the British Columbia Conservation Data Centre (CDC) in 2000. In May 2000, the federal Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated woodland caribou in the southern two thirds of British Columbia in the Southern Mountains National Ecological Area (SMNEA) as nationally threatened. Threatened species are considered likely to become endangered if limiting factors are not reversed and are species at risk under the federal *Species at Risk Act*. Woodland caribou in Stikine Country Protected Areas are in the Northern Mountains National Ecological Area (NMNEA) and are designated as Special Concern and are not species at risk under the *Species at Risk Act*. A species is designated Special Concern because of characteristics that make it particularly sensitive to human activities or natural events. The provincial government is currently in the process of finalizing a recovery strategy for Northern Caribou in the Southern Mountains National Ecological Area.

Table 4. Red, Blue and Yellow Listed Bird Species Observed in Stikine Country Protected Areas.

Species	Provincial List	Mount Edziza Provincial Park and proposed Protected Area	Stikine River Provincial Park	Spatsizi Plateau Wilderness Provincial Park and Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Trumpeter Swan	Blue		+[1]		
Long-tailed ducks (Oldsquaw)	Blue	+			+
Lesser Golden Plover	Blue	+		+	
Wandering Tattler	Blue	+		+	
Upland Sandpiper	Red			+	
Red-necked Phalarope	Blue	+		+	+
Bald Eagle	Yellow	+	+	+	+
Peregrine Falcon ssp. Anatum	Red	+		U	
Gyrfalcon	Blue	+	+	+	+
Short-eared Owl	Blue			+	
Smith's Longspur	Blue			+	+

[1] + = confirmed sighting; U = unconfirmed sighting

The peregrine falcon (subspecies *anatum*), which was designated as Threatened by COSEWIC in May 2000, is the only species in the Stikine Country Protected Areas System that is protected under the federal *Species at Risk Act*. Other COSEWIC designations for species found in the Stikine Country Protected Areas include:

- short-eared owl – Special Concern (1994);
- grizzly bear – Special Concern (May 2002);
- wolverine – Special Concern (1989);
- gyrfalcon – Not at Risk (1987); and,
- trumpeter swan – Not at Risk (1996).

A prime conservation concern for species at risk in the Stikine Country Protected Areas System is the lack of basic inventory information. Additional species at risk may also be present but remain unidentified. More information is also required to verify existence of unique animals such as pikas and melanistic chipmunks in Tatlatui Provincial Park.

Recently, amphibian abundance has been declining worldwide. The Stikine Country Protected Areas System will be important for baseline information on amphibians in a system relatively undisturbed by humans.

8.5.4.1 General Management Direction

Overall Direction

For wildlife species at risk and special and sensitive species, the role of the Stikine Country Protected Areas System is to provide a large core area of habitat that is for the most part undisturbed by humans. The focus is on understanding, monitoring and maintaining habitat and dynamics of species at risk.

Objectives and Strategies

To protect known wildlife species at risk and their habitat.

- Compile known locations of wildlife species at risk in the Stikine Country Protected Areas System.

- Determine habitat and life cycle requirements of wildlife species at risk known to occur in Stikine Country Protected Areas.
- Develop guidelines for minimizing disturbance to wildlife species at risk and their habitat.
- Support development and implementation of recovery plans (required by the Federal *Species at Risk Act*) for species at risk.

To increase the information base on wildlife species at risk.

- Collaborate with the British Columbia Conservation Data Centre to determine potential wildlife species at risk present in Stikine Country Protected Areas.
- Conduct surveys for potential wildlife species at risk.

To monitor population status of grizzly bear, wolverine and fisher.

- Develop a monitoring strategy for wolverine and fisher for Stikine Country Protected Areas and monitor population status of those species.
- Monitor hunter harvests for grizzly bear and trapping harvests for wolverine and fisher and revise or establish quotas if necessary.
- Continue to review new developments in estimating grizzly bear abundance techniques.

To establish a baseline monitoring program for amphibians in an ecosystem relatively undisturbed by humans.

- Undertake basic amphibian inventories in the Stikine Country Protected Areas System.
- Develop a baseline monitoring program for amphibians that are found to occur in Stikine Country Protected Areas.

8.5.4.2 Protected Area-Specific Management Direction

Tatlatui Provincial Park – Objectives and Strategies

To conserve pikas and melanistic chipmunks.

- Confirm sightings of pikas and melanistic chipmunks.
- Conduct ground investigations to determine extent and range of those species.
- Develop guidelines to minimize disturbance to habitat and colonies.

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area – Objectives and Strategies

To assess caribou winter habitat requirements.

- Conduct a study using radio-collars for caribou to determine winter habitat use and important wintering areas.

8.5.5 Wildlife Movements

Although Stikine Country Protected Areas conserve over 1.4 million contiguous hectares of land and water, animals will continue to move beyond protected area boundaries and be influenced by management activities outside of the protected areas. Populations of large mammals such as grizzly bear, black bear, wolf, wolverine, caribou, moose, Stone's sheep and mountain goat are likely to move beyond protected area boundaries for habitat or life cycle requirements. Smaller animals moving beyond protected area boundaries are likely dispersers or animals with home ranges near boundaries. Stikine Country Protected Areas encompass a large enough area to maintain self-sustaining populations of those smaller species. Stikine Country Protected Areas also provide low elevation wildlife corridors along the Pitman and Chukachida rivers to high value wildlife habitat and protected areas to the east.

Three significant wildlife habitat areas identified adjacent to the Stikine Country Protected Areas System include the McBride River area, the Klappan River area, and the Sturdee River area. The McBride River area includes important winter range for the Spatsizi caribou population; the Klappan River area includes important moose winter range and some caribou range; and the Sturdee River area provides some caribou and moose winter range.

8.5.5.1 General Management Direction

Overall Direction

The Stikine Country Protected Areas System is a core of protected areas for large mammal species in the region. Environmental Stewardship Division will work with other agencies and First Nations to coordinate management of known areas of use outside of protected area boundaries and to maintain wildlife movement corridors along the Pitman and Chukachida rivers.

Objectives and Strategies

To coordinate with other agencies and First Nations to minimize impacts on Stikine Country Protected Areas' wildlife moving beyond protected area boundaries.

- Ensure protected area objectives are considered in hunting and trapping regulations in areas adjacent to the Stikine Country Protected Areas System within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem.
- Collaborate with the Ministry of Forests to establish habitat management objectives for areas adjacent to the protected areas that are known to be used by protected area wildlife.
- Work with the Ministry of Energy and Mines during planning and development activities on adjacent lands in the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem to minimize disturbance to protected area wildlife populations.
- Collaborate with the Ministry of Energy and Mines and the mining industry to minimize and mitigate impacts on the Pitman River and Chukachida River wildlife movement corridors.
- Work with other agencies, First Nations and the resource industry to maintain regional connectivity for wide ranging large mammal species.

8.5.6 Wildlife/human interactions

Wildlife and human interactions may be neutral, positive or negative. Neutral interactions include humans observing wildlife undetected. Negative interactions between humans and wildlife include displacement of wildlife from high quality habitats, disturbance to wildlife habitat, human-caused mortalities and disruption of social bonds and behaviour. Although most human disturbance is often unintentional, the effects of disturbance are often negative regardless of the intent. Bear/human interactions are the most significant impacts of wildlife on humans. Bear/human interactions can result in injury or death to humans, and subsequent mortality of the responsible bear(s). Therefore, for visitor safety, avoidance of bear/human interactions is preferable.

8.5.6.1 General Management Direction

Overall Direction

The management priority for Stikine Country Protected Areas is conservation of natural and cultural values. Therefore, human/wildlife interactions will be managed to minimize negative impacts to wildlife populations.

Objectives and Strategies

To protect wildlife populations during sensitive seasons, such as winter, and the spring birthing season.

- Monitor outdoor recreation and commercial activities and their impacts on wildlife during sensitive seasons and implement strategies to minimize disturbance if necessary.
- Encourage visitors and commercial operators to avoid known high value winter habitat and birthing areas during those seasons. If necessary, close areas to human access to protect wildlife during sensitive seasons.

To minimize habitat disturbance.

- Identify important wildlife habitat and characteristics.
- Provide visitors and commercial operators with information on the significance of wildlife habitat and impacts from disturbance, especially those habitats highly sensitive to disturbance.
- Encourage visitors and commercial operators to avoid using known high value sensitive habitat. If necessary, close areas to human access to protect sensitive wildlife habitat.

To minimize human/bear interactions.

- Provide visitors and commercial operators with information on how to avoid human/bear interactions.
- Enforce garbage handling and disposal guidelines for commercial operators in Stikine Country Protected Areas.
- Implement the BC Parks Skeena District Bear/Human Interaction Plan. Key elements of this plan include:
  - ➢ preventative management:
    - ⇨ visitor information/education on bear behaviour and bear-human conflict prevention;
    - ⇨ visitor information/education on appropriate human behaviour to minimize the potential for bear-human conflicts;
    - ⇨ appropriate facility location and design; and,
    - ⇨ appropriate food and garbage handling.
  - ➢ responsive management if necessary:
    - ⇨ monitoring bear activity;
    - ⇨ advising visitors;
    - ⇨ aversive conditioning;
    - ⇨ area closures; and/or,
    - ⇨ as a last resort, trapping and translocating or destroying a bear.

To investigate potential impacts of new or expanded commercial recreation activities on wildlife.

- Develop funding partnerships with commercial operators to identify potential effects of new or expanded commercial recreation activities on wildlife and to monitor those effects.

To encourage neutral human/wildlife interactions.

- Develop guidelines for encounters between protected area visitors and wildlife to minimize disturbance and displacement of animals.
- Encourage wildlife viewing opportunities that avoid animal disturbance.

8.6 Aquatics

Watersheds in Stikine Country Protected Areas drain into both the Pacific and Arctic oceans. In Tatlatui Provincial Park all water flows through the Firesteel River to the Finlay and Peace River systems and into the Arctic Ocean. Waters in all the other protected areas empty into the Pacific Ocean via the Stikine and Iskut rivers. Aquatic ecosystems in Stikine Country Protected Areas are diverse, ranging from high mountain lakes to low elevation lakes and wetlands.

In 1998, DeGisi collated and summarized existing information about fish in Stikine Country Protected Areas for BC Parks (DeGisi 1998). Most of the available information is limited to recreationally significant species; therefore little is known about other species. Aquatic inventories were conducted for some lakes in Spatsizi Plateau Wilderness and Tatlatui provincial parks in 1976, and in Mount Edziza Provincial Park in 1982; drainages near the western boundary of Spatsizi Plateau Wilderness Provincial Park were recently sampled during an Overview of Fish and Fish Habitat Inventory of the Klappan watershed. Information for other waters in Stikine Country Protected Areas, including the Chukachida and Pitman rivers, is limited.

One reason for the limited information on fish species in the Stikine Country Protected Areas System is the expense of collecting the information. The remoteness of most waters within the Stikine Country Protected Areas System creates numerous logistical difficulties.

8.6.1 Fish Species and Distribution

Fish species present in Stikine Country Protected Areas are representative of northern interior and Pacific systems. All protected areas encompass portions of, or complete watersheds and lake systems.

Records show rainbow trout are the most widely distributed species and exist in all waters surveyed in Stikine Country Protected Areas except Kliweguh Creek in Spatsizi Plateau Wilderness Provincial Park (Appendix 9). Rainbow trout are the only fish species found in all waters in Tatlatui Provincial Park and in waters in the Kakiddi Creek system (Kakiddi Creek, Kakiddi Lake, Mowchilla Lake, Mowdade Lake and Nuttlude Lake) in Mount Edziza Provincial Park. These are the only two areas in British Columbia where a monoculture of rainbow trout occurs over a large area (>1000 km^2). In the upper Iskut River system, a barrier to upstream migration for other fish species exists at a canyon near Forest Kerr Creek. In the Firesteel River system in Tatlatui Provincial Park, velocity barriers at the lower end of the river prevent upstream movement of other fish. Rainbow trout are also the only species present in Buckinghorse and Klahowya lakes in Spatsizi Plateau Wilderness Provincial Park.

Figure 14. Firesteel River, Tatlatui Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal2.htm

There are two species of char in the Stikine River drainage within Stikine River and Spatsizi Plateau Wilderness provincial parks, bull trout and Dolly Varden (*Salvelinus malma*). Other species found in the Stikine River system within Stikine River and Spatsizi Plateau Wilderness provincial parks include Arctic grayling (*Thymallus arcticus*), burbot (*Lota lota*), lake trout (*Salvelinus namaycush*), longnose sucker (*Catostomus catostomus*), prickly sculpin (*Cottus asper*) and mountain whitefish (*Prosopium williamsoni*). Lake trout are generally limited in distribution and have been detected only in Cold Fish Lake, Mink Creek and the Stikine River in the Stikine Country Protected Areas System. Although lake trout have been recorded in the Stikine River, they are likely only transients in the river and are not a self-sustaining population. Arctic grayling exist primarily in Arctic waters; their occurrence in Pacific waters in the Stikine River system is of particular interest.

Buckley Lake is believed to be a naturally fishless lake although there are reports that it was illegally stocked with rainbow trout probably around 1990. Rainbow trout found in the lake today are typically large and unconfirmed reports suggest that some reproduction may be occurring. Further information is required to determine the origin and status of the rainbow trout population. Buckley Lake may have also been stocked with rainbow trout in the 1930s but a self-sustaining population was not established. No records exist of any other authorized or unauthorized fish stocking of lakes in Stikine Country Protected Areas. Trout stocking in other areas has resulted in declines in amphibian numbers (Funk and Dunlap 1999).

Because of lower average temperatures, a shorter "growing" season and typically nutrient-poor conditions, waters in northwestern British Columbia are generally less productive than waters in other areas of the province. Individual fish may still reach large body size through low natural mortality, delayed maturity and longevity, especially if population numbers are low because of limited reproductive habitat. However, such populations are vulnerable to overexploitation.

Lakes in Mount Edziza Provincial Park and Mount Edziza Protected Area (proposed) are relatively productive for northern British Columbia, probably because of the nutrient content of the surrounding volcanic soils. Rainbow trout in those lakes are small to moderate in body size and exist at high densities, likely a result of high productivity and abundant accessible spawning habitat.

Lakes in Tatlatui Provincial Park are deep and unproductive and, with the exception of the 'middle' Firesteel River, most streams and rivers are turbulent with many rapids and chutes. Because of the high gradient and barriers to fish movement, several discrete populations of rainbow trout appear to exist including: Tatlatui Lake; the upper Firesteel River (possibly continuous with Tatlatui Lake); the low gradient 'middle' Firesteel River; the turbulent lower Firesteel River; Kitchener Lake, lower Stalk Creek and upper Rognaas Creek; and Stalk Lakes and upper Stalk Creek. Rainbow trout in Tatlatui Provincial Park rarely exceed two kilograms in weight.

The Grand Canyon of the Stikine River acts as a velocity barrier that prevents anadromous fish species from moving upstream. The distribution of chinook (*Oncorhynchus tshawytscha*), coho (*O. kisutch*) and sockeye salmon (*O. nerka*), steelhead, and cutthroat trout (*O. clarki*) is restricted to the lower reaches of the Stikine River and its tributaries within Stikine River and Mount Edziza provincial parks. Chinook salmon have been reported at the mouth of the Klastline River but they do not appear to reach the Tanzilla River. Most of the anadromous species found in the Stikine River are in transit to the Tahltan and lower Tuya rivers. The Tahltan and Tuya rivers lie outside of Stikine Country Protected Areas. Within Stikine River and Mount Edziza provincial parks, extremely limited spawning may occur in the lower reaches of Stikine River tributaries and possibly in the Stikine River mainstem itself. Chinook salmon and steelhead have also been recorded in Mess Creek and likely occur in the lower reaches of Line Creek in Mount Edziza Provincial Park. The Stikine River and its tributaries below the canyon also support resident rainbow trout, cutthroat, bull trout, Dolly Varden, mountain whitefish and Arctic grayling. In addition, lake chub (*Couesius plumbeus*) have been recorded in the Stikine River near Telegraph Creek. No information exists to indicate whether the species occurs upstream.

8.6.2 Fish Species at Risk

Bull trout is a blue-listed species that occurs in waters within Spatsizi Plateau Wilderness and Stikine River provincial parks. Both Dolly Varden and bull trout exist in the area; however, it remains unclear if the two species coexist because of the difficulty in distinguishing between the two species. Large resident char (up to eight kilograms) are more likely to be bull trout as non-anadromous Dolly Varden do not usually attain such size. Spatsizi Plateau Wilderness and Stikine River provincial parks along with Chukachida Protected Area and Pitman River Protected Area constitute the only fully protected area in British Columbia enclosing contiguous streams, large rivers and lakes believed to support this species in the full diversity of its life histories (except anadromy).

Bull trout are either lake residents or river residents and can make long migrations (up to 300 kilometres) to spawn in smaller clear water streams in late summer and fall. Large char found in the larger rivers (e.g. Stikine, Spatsizi, Pitman and Chukachida rivers) may either be residents of those rivers or are migrating to spawning areas. During migration and reproduction (during the late summer and fall) the fish are aggressive and accessible, and are therefore highly vulnerable to angling. Because these fish are slow growing, late maturing and relatively low in abundance, excessive angling can have significant effects on the populations. Various regulations to protect bull trout such as "slot" size limits and non-retention in streams have been introduced in other areas of British Columbia.

Currently, limited information is available about bull trout for the Pitman and Chukachida rivers. Both rivers support large, migratory bull trout, which migrate from larger waters downstream, such as the Stikine River, to headwaters to reproduce. In shallower parts of the river, bull trout collect in pools or at confluences before proceeding upstream when conditions are good. Bull trout are vulnerable during migration especially where bridges or roads are close to migratory aggregation areas.

8.6.3 Angling

Angling regulations for Stikine Country Protected Areas generally follow Skeena Region-wide regulations. Tatlatui Provincial Park lies within the British Columbia Ministry of Water, Land and Air Protection's Region 7 and all other protected areas lie within Region 6 (Appendix 9).

In the Stikine River system in Region 6, anglers have a monthly quota of two and an annual quota of 10 steelhead. In addition, when an angler has caught and retained the daily quota of steelhead they must stop fishing that water for the remainder of that day.

Few regulations specific to Stikine Country Protected Areas' waters exist. Specific regulations for Buckinghorse and Klahowya lakes in Spatsizi Plateau Wilderness Provincial Park were implemented to maintain the small population of large-sized rainbow trout. A bait ban was instituted for Stalk Lakes in Tatlatui Provincial Park and a daily catch quota of two rainbow trout was established for Tatlatui Lake. In 2002, Skeena Region established a bait ban, single barbless hook and daily catch quota of two rainbow trout (none over 50 centimetres) for Buckley Lake.

Several park use permits have been issued for guided angling within the protected areas. For those protected areas in Region 6, rod-days were allocated to angling guides for specific water bodies. Three angling guides operate in Tatlatui Provincial Park; however no angler-day allocations are specified. Most angling guides promote non-retention angling. Management of commercial angling guiding has traditionally consisted of considering angler-day applications by guides. DeGisi (1998) proposed a potential approach for managing angling guiding for parks and protected areas in Environmental Stewardship Division, Skeena Region. The system defines an angling zone for each water body or set of adjoining waterbodies, classifies waterbodies (or angling zones) into angling "experience" categories, and assigns rod-days by experience category by protected area.

Under the *Wildlife Act*, a "guide for fish" is:

- *"a person who, for compensation or reward received or promised,*
  (a) accompanies another person and assists that person to angle,

> *(b) attends another person at or near an angling site in a manner that, directly or indirectly, assists that person to angle, or*
> *(c) transports, for the purpose of angling, another person to, from or between angling sites,*
> *but does not include a member of a class of persons prescribed by the Lieutenant Governor in Council."*

An "angling guide" is a person licensed as an angling guide under the *Wildlife Act*. Therefore, commercial operators require permits for angling guiding even if their primary activity is not angling but their clients wish to angle as part of their outdoor recreation experience. Currently, most of the permitted angling guides in the Stikine Country Protected Areas System use their rod-day allocations conducting angling guiding as an exclusive activity. However, because of the definition of guided angling, there is increasing interest in guided angling permits that are incidental to other activities such as rafting, canoeing or hiking. Angling guides submit annual reports on guided angling activities and fish harvested.

Less information is available on non-guided angling. Currently, voluntary creel surveys are conducted in portions of Spatsizi Plateau Wilderness Provincial Park. Voluntary creel surveys in other areas in Stikine Country Protected Areas have been more challenging to conduct because of difficult access to those areas.

Figure 15. Anglers on the Spatsizi River, Spatsizi Plateau Wilderness Provincial Park

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal3.htm

8.6.4 General Management Direction

Overall Direction

The management priority for fish is to conserve natural fish population diversity, distribution and dynamics throughout waters in Stikine Country Protected Areas. Fish stocking will not be considered unless populations are declining severely and population viability is threatened because of human-caused disturbances. Similarly, stocking will not be considered to enhance angling opportunities. Determining the status and maintaining viable populations of bull trout is a priority.

Objectives and Strategies

To ensure the natural functioning of fish populations.

- Identify and establish waters that can be used as benchmarks for the study of native fish species that are unaffected by human disturbance, including angling.
- Identify aquatic habitats that are sensitive to jet boat use and implement restrictions if necessary.
- Monitor the rainbow trout only aquatic systems of Stikine Country Protected Areas.

To provide a range of recreation angling opportunities that has low impacts on fish populations.

- Establish a system of waters that includes a variety of recreational angling opportunities, such as limited daily catch quotas and catch and release only angling, in consultation with angling guides, anglers and First Nations.
- Investigate and implement angling regulations that conserve large-sized bull trout in the Stikine River system. Pay special attention to the fall spawning season when bull trout are especially vulnerable because of their aggressive nature and aggregating behaviour, and when riverboat travel is greatest because of hunting.
- Encourage angler compliance with angling regulations by maintaining postings of provincial sport angling regulations at access points to the protected areas where angler reports are distributed and collected (especially Highway 37).
- Annually review the angling effort and harvest levels to ensure levels do not adversely influence conservation objectives.
- Assess impacts of angling on the lake trout population in Cold Fish Lake and implement water-specific angling regulations if necessary.
- Investigate the degree of angler interest in Arctic grayling in the Stikine Country Protected Areas System and implement measures to conserve Arctic grayling populations if necessary.
- Consider implementing restrictive regulations for angling harvest of species at risk such as bull trout.
- Consider managing angling opportunities within the protected areas system more conservatively than angling opportunities outside of protected areas.

To quantify non-guided angling activity and harvest.

- Develop a system for monitoring angling pressure by non-guided anglers.
- Continue voluntary creel censuses with distribution and drop points at all registration and access locations. Cards should be coded prior to distribution to identify angler data by point of origin.

- Investigate and implement means of achieving higher participation rates for creel surveys.
- Implement a simple reporting program by angling guides of observed non-guided angling activities.

To manage angling guide activities.

- Monitor angling guide activity through annual reporting of client angling activity, catch and harvest on each waterbody for each guide and compile information annually.
- Determine existing angling guides and rod-day allocations within recently established protected areas and additions and accommodate existing tenures.
- Consider developing a system for managing angling and angling guiding that defines an angling zone for each water body or set of continuous waterbodies, classifies waterbodies (or angling zones) into angling experience categories, and assigns rod-days by angling category by protected area. Develop the system in consultation with angling guides, anglers and First Nations.
- Consider angling guide permits for commercial operators offering guided angling opportunities incidental to other commercial outdoor recreation activities on an individual basis. The intent of these permits is to allow clients some angling opportunities as part of their outdoor recreation experience but not as their primary activity. General angling regulations will apply with additional restrictions on daily catch quotas and possession limits.
- Consider new angling opportunities only if an analysis determines that conservation and wilderness objectives will not be compromised.

To minimize and mitigate impacts of increased angling pressure on protected area fish populations if improved road access is required.

- Monitor angling pressure prior to and after development if improved access is required and revise angling regulations if necessary.

To safeguard the opportunity of First Nations to take fish for ceremonial or sustenance purposes.

- Continue to work with First Nations on issues pertaining to opportunities to take fish for ceremonial or sustenance purposes.

8.6.5 Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area – Objectives and Strategies

To ensure that if a mining road is required to provide access to mining activities in the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) that it has minimal impacts on fish populations on the Kakiddi Lakes chain.

- Monitor angling pressure on the Kakiddi Lakes chain prior to and after development if a mining access road is required and revise angling regulations if necessary.

To investigate the status of the rainbow trout population in Buckley Lake.

- Conduct investigations to determine the population and reproductive status of the rainbow trout population including:
  - ➢ field sampling of age class structure;

  - assessment of potential spawning streams; and,
  - interviews with First Nations elders.
- Reassess angling regulations based on new biological information collected.
- Monitor harvest levels and changes in population structure.
- Do not allow further stocking of Buckley Lake.

To manage the rainbow trout population in Buckley Lake as a quality rainbow trout fishery.

- Use the system for managing angling and angling guiding that will be developed to assign an appropriate lake classification and angling use levels for Buckley Lake.
- Provide appropriate opportunity for commercial guided angling.

Chukachida Protected Area and Pitman River Protected Area – Objectives and Strategies

To ensure that if bridges/road crossings are required across the Pitman or Chukachida rivers that they do not result in increased impacts such as increased angling pressure on fish populations in those rivers.

- Conduct aquatic inventories for the Chukachida River and Pitman River to identify important bull trout habitat and to collect basic aquatic information.
- Work with other agencies and First Nations to ensure that if bridges are developed across the Pitman River or Chukachida River that they avoid crossing those rivers near important bull trout habitat.
- Work with other agencies and First Nations on access management for the Chukachida and Pitman rivers if roads crossing those rivers are developed.
- Monitor angling pressure on the Pitman River prior to and after development if bridge/road crossing is required and revise angling regulations if necessary.
- Monitor angling pressure on the Chukachida River prior to and after development if bridge/road crossing is required and revise angling regulations if necessary.

Spatsizi Plateau Wilderness Provincial Park and Stikine River Provincial Park - Objectives and Strategies

To quantify angling activity and harvest.

- Conduct a "Voluntary Angler Report" program for waters in the Stikine River drainage east of Highway 37, which includes distribution/drop boxes at Cold Fish Lake, Didene Portage, Tuaton or Laslui Lake, and the Highway 37 access point.

To manage guided angling activity to maintain a quality wilderness angling experience for both guided and unguided anglers.

- Consider additional angling guide permits and/or additional rod-days for commercial operators offering guided angling opportunities that are not incidental to other commercial outdoor recreation activities only if an analysis determines compatibility with conservation and wilderness objectives.
- Consider angling guide permits for commercial operators offering guided angling opportunities incidental to other commercial outdoor recreation activities on an individual basis. The intent of these permits is to allow clients some angling opportunities as part of their outdoor recreation experience but not as their primary activity. General angling

regulations will apply with additional restrictions on daily catch quotas and possession limits.

Tatlatui Provincial Park - Objectives and Strategies

To manage guided angling activity to maintain a quality wilderness angling experience for both guided and unguided anglers.

- Allow no more than three angling guides to conduct guided angling activities.
- Establish a working group consisting of government staff, First Nations, angling guides, anglers, and other stakeholders to develop specific guidelines for angling and angling guide management in Tatlatui Provincial Park. Consider defining an angling zone for each waterbody or adjoining waterbodies, classifying waterbodies (or angling zones) into angling experience categories, and assigning rod-days by experience category.
- Maintain Trygve Lake as the single unguided water body.
- Monitor all angling guide activity, including that occurring in months other than July and August, through annual reporting of client angling activity, catch and harvest.

8.7 Scientific Research and Education

Detailed information about the natural and cultural values in protected areas is critical for proper management. To obtain this information, Environmental Stewardship Division will foster and encourage scientific research projects within Stikine Country Protected Areas. The northern focus of the University of Northern British Columbia makes this institution a logical partner in research projects.

8.7.1 General Management Direction

Overall Direction

The management priority for scientific research and education is to promote initiatives that are consistent with management direction established for the Stikine Country Protected Areas System.

Objectives and Strategies

To collect information on the natural and cultural features of Stikine Country Protected Areas and make results of the studies known and understandable.

- Encourage the study of all aspects of Stikine Country Protected Areas' natural history by academic and scientific organizations, with special attention to the following priorities:
  - harvested fish and wildlife;
  - vegetation including species at risk;
  - non-harvested fish and wildlife;
  - terrestrial ecosystem inventories;
  - backcountry outdoor recreation use and activity and their effects on natural and cultural values; and,
  - cultural heritage.
- Encourage the study of cultural heritage and history of the protected areas that respects First Nations' concerns.
- Ensure that information collected is analyzed and written up promptly and communicated appropriately to end users and the public.

8.7.2 Protected Area-Specific Management Direction

Gladys Lake Ecological Reserve

To encourage scientific research that focuses on naturally functioning ecosystems with a priority on Stone's sheep, mountain goat, caribou and grizzly bear populations and habitat, and on species and plant communities at risk.

- Consider proposals for scientific research consistent with the objectives for the ecological reserve and this management plan. Research priorities include: naturally functioning ecosystems (including use of the ecological reserve as a benchmark for measuring the effects of human use that occurs in other areas); Stone's sheep, mountain goat, caribou and grizzly bear populations and habitat; and species and plant communities at risk.

To accommodate guided and unguided ecological education.

- Consider proposals for guided or unguided educational opportunities involving an approved educational plan and subject to a full assessment of potential impacts on ecological reserve values. Priority topics for educational activities are: the significance and intent of the Ecological Reserve system in British Columbia; the role of Gladys Lake Ecological Reserve in the protected areas system in British Columbia; Gladys Lake Ecological Reserve values; natural ecosystem function; wildlife ecology (especially on Stone's sheep, mountain goats, caribou and grizzly bears); boreal vegetation ecology; species and plant communities at risk; geological features and processes; and the role of humans in the ecosystem. Activities that compromise ecological reserve values will not be considered.

9 A Place for People to Enjoy – Managing Outdoor Recreation Opportunities

9.1 Introduction

The Stikine Country Protected Areas System contains a diverse range of natural features that support a wide variety of outdoor recreation activities and users. These protected areas are internationally renowned for their outstanding wilderness and wildlife. The remote wilderness quality of much of Stikine Country Protected Areas is one of its most significant features. Extensive areas of unroaded wilderness are becoming rare in British Columbia as industrial development continues into previously inaccessible areas. The Stikine Country Protected Areas System provides a major contribution to the protection of wilderness provincially, nationally and internationally.

The protected areas provide opportunities for wilderness tourism and wilderness recreation in a vast, mostly unroaded wilderness region containing mountains, alpine plateaus, low elevation boreal forests and navigable rivers, where signs of human activity are few. Few places in British Columbia and Canada rival the diversity of landscapes, intact wild land ecosystems, large and small mammal wildlife populations, non-consumptive and consumptive outdoor recreation opportunities and special cultural heritage values that exist in this region.

Outdoor recreation activities include extended backcountry hiking and horse trips, wilderness canoeing and rafting, wildlife viewing, nature appreciation, and resident and commercial hunting and fishing. All of these outdoor recreation activities take place in a relatively pristine wilderness setting with difficult access, except by air transport. Most backcountry users are self-sufficient during their trips; however, some facility-based recreation opportunities are available at the public cabins at Cold Fish Lake in Spatsizi Plateau Wilderness Provincial Park. Wilderness tourism is also available through commercial guided backcountry recreation trips. Although Highway 37 and the Telegraph Creek Road pass through Stikine River Provincial Park, few frontcountry facilities exist in the area. The landscapes of Stikine Country Protected Areas, especially the volcanic deposits and the Grand Canyon of the Stikine River, are not widely found outside the protected areas; these features are a focus for visitors to and residents of the Cassiar area.

This section of the management plan describes outdoor recreation opportunities in Stikine Country Protected Areas, the general outdoor recreation management direction, management objectives, and management strategies for attaining these objectives. The goal for visitor management in Stikine Country Protected Areas is to provide opportunities for visitors to have a safe and enjoyable visit without compromising natural and cultural heritage values or visitor wilderness experience. Therefore, two primary factors have to be evaluated to assess whether this goal is currently being achieved:

- visitor impacts on natural and cultural heritage; and,
- visitor impacts on other visitors.

Conservation of natural and cultural values is the management priority in the Stikine Country Protected Areas System. The challenge within these protected areas is to sustain the pristine environment and wildlife populations that these protected areas are renowned for, while maintaining the wilderness experience for all visitors and providing outdoor recreation opportunities. Another challenge is to maintain facilities such as trails for public and commercial recreation with declining budgets; additional sources of revenue or partnerships in maintaining facilities will be necessary.

9.2 Outdoor Recreation Opportunities, Facilities and Access

9.2.1 Access

Access to Stikine Country Protected Areas is primarily by floatplane to the lakes of the protected areas; by foot or horse from various road access points; by floatcraft (i.e. raft, canoe or kayak) down the Stikine and Spatsizi rivers; and by motorboat up the Stikine River. Others means of access include limited helicopter access and some snowmobile access on the Klastline Trail to the Klastline area.

Access management is critical to the protection of natural, cultural heritage and wilderness values. Inappropriate levels or modes of access can affect fish and wildlife populations, assist the introduction of exotic plants and animals, damage special cultural and geological features, and degrade wilderness values. The careful management of access can maintain these values while still providing outdoor recreation use of the protected areas.

9.2.1.1 General Management Direction

Appropriate access to and within Stikine Country Protected Areas will continue for management, outdoor recreation, and traditional use purposes. Since maintaining a wilderness experience is a priority, acceptable types of access will be carefully managed at appropriate levels to ensure that impacts on natural, cultural heritage and wilderness values are avoided. Reasonable access by First Nations to exercise existing aboriginal rights will be accommodated consistent with court decisions and management direction in this plan. Access for management purposes by Ministry of Water, Lands and Air Protection staff and designated contractors will be permitted to all areas within the Stikine Country Protected Areas System by appropriate means.

9.2.1.2 Air

Floatplanes are commonly used by private groups and commercial operators to gain access to Stikine Country Protected Areas. Floatplane landings take place on many lakes and some rivers within the protected areas including: Buckinghorse, Bug, Cartmel, Cold Fish, Ella, Happy, Hotlesklwa, Laslui, Metsantan and Tuaton lakes and the Spatsizi River in Spatsizi Plateau Wilderness Provincial Park; Buckley, Mowdade, Nuttlude, Kakiddi and Little Ball lakes in Mount Edziza Provincial Park; Kitchener, Stalk, Tatlatui and Trygve lakes as well as the Firesteel River in Tatlatui Provincial Park; Chukachida Lake in Chukachida Protected Area; Pitman Lake in Pitman River Protected Area; and, the Stikine River in Stikine River Provincial Park.

Figure 16. Floatplanes are commonly used to access Stikine Country Protected Areas.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal3.htm

Wheel plane activity is currently low because of limited landing opportunities. In the past, landings occurred more frequently when the airstrip at Cold Fish Lake was operational. The airstrip at Cold Fish Lake is no longer maintained and is marked as closed. However, a small number of private planes still use the airstrip each year. A landing strip exists on the private property at Hyland Post, which the owners use to bring clients into their guide-outfitting area. People use skiplanes to gain access to some areas in the winter. Air traffic can disturb wildlife and spoil visitor experiences by disturbing them and by increasing the number of people in the backcountry.

Helicopter access to the protected areas is not as common as floatplane access. Helicopter landings on the cinder cones are prohibited in Mount Edziza Provincial Park. Some scenic flight activity occurs over the Grand Canyon of the Stikine River. According to the 2003 *Park Act* regulations, visitors are required to have authorization from Environmental Stewardship Division before arriving or departing from Spatsizi Plateau Wilderness, Mount Edziza and Tatlatui provincial parks with an aircraft. Gladys Lake Ecological Reserve is closed to aircraft access.

General Management Direction

Overall Direction

Floatplanes are recognized as an historical and important means of access to Stikine Country Protected Areas. Air access to the protected areas will continue to be primarily by floatplane with small numbers of helicopter drop-offs and pick-ups. Aircraft use will be managed as a form of transportation and will be carefully managed to maintain natural, cultural heritage and wilderness values. New methods of air access will not be allowed.

Objectives and Strategies

To provide a level of floatplane and skiplane access that allows visitors to enjoy Stikine Country Protected Areas without unacceptable impacts on natural and cultural heritage values and the wilderness experience of other users.

- Manage aircraft use as a means of transportation.
- Monitor the number of flights, visitor experience quality and possible environmental impacts over time. In consultation with the BC Floatplane Association, the BC Aviation Council, commercial operators and private users, assess whether guidelines or site specific restrictions (e.g. number of commercial aircraft charter companies) are desirable. Implement management regime as necessary.
- Discourage, and if necessary, in consultation with Transport Canada, limit low aircraft flights during the ungulate birthing and post-natal season, May 15 – July 15, in birthing and rearing areas.
- In consultation with the BC Floatplane Association (BCFA), Canadian Owners and Pilots Association (COPA), BC Aviation Council, commercial operators, charter operators and other users, develop protocols/approaches to manage aircraft use to meet protected area management objectives. In the short term, approaches will recognize the existing regulation governing aircraft use.
- Add updated protected area boundaries to aeronautical charts. Also, add sensitive sites to aeronautical charts if necessary.
- Work with aviation organizations (BC Floatplane Association, BC Aviation Council, etc.) and commercial air charter companies to educate pilots on the effects of aircraft on wildlife.

To provide low levels of helicopter access for limited purposes.

- Limit helicopter access to drop-off and pick-up points for multi-day trips. Some areas will be closed to helicopter access and other areas will have designated landing sites. Consider other helicopter landings only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Allow helicopter landings for management purposes and approved research or inventory projects.
- Designate helicopter landing sites for outdoor recreation purposes if necessary and require prior approval to land within the protected areas system. Helicopter landing sites should be more than 2000 meters from mountain goat and mountain sheep habitat as per the draft Ministry of Water, Land and Air Protection Skeena Region's Heli-sport Performance Criteria.
- Prohibit outdoor recreation day-use of helicopters involving multiple take-offs and landings (i.e. heli-hiking, heli-skiing and heli-fishing). Multiple take-offs and landings in one day may be considered only for portaging canoes and rafts, or from the Intensive Recreation Zone near Highway 37 (but not for heli-hiking, heli-skiing or heli-fishing purposes).

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To maintain the present pattern of floatplane landings in the park and protected area with a greater number of landings on lakes in the Buckley Lake and Kakiddi Lakes areas than in the Spectrum Range area.

- Monitor aircraft use levels and visitor satisfaction to determine the need for use limits.

To protect sensitive plateau areas from disturbances.

- Maintain the prohibition of wheeled aircraft landings.
- Close the Volcanic Plateau to helicopter landing.

To ensure that helicopter access does not result in unacceptable impacts on cinder cones, and on hot springs and their calcite deposits.

- Maintain the ban on helicopter landings on the cinder cones and implement a ban on helicopter landings on calcite deposits, associated plant communities or other associated features at any hot springs.

Spatsizi Plateau Wilderness Provincial Park, Stikine River Provincial Park - Objectives and Strategies

To protect the wilderness character of Stikine Country Protected Areas.

- Close the Stikine Grand Canyon, Dawson/Tomias, Eaglenest/Plateau, Upper Stikine, Metsantan and Chapea management areas to helicopter landing, except for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected area system.

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To maintain floatplane access as the main air access method.

- Continue to maintain the deactivated status of the Cold Fish Lake airstrip.

To protect the cultural heritage values of Metsantan village.

- Manage aircraft access to Metsantan Lake to protect cultural values.

Gladys Lake Ecological Reserve - Objectives and Strategies

To eliminate aircraft landings in Gladys Lake Ecological Reserve.

- Close Gladys Lake to aircraft landings, except for research and management purposes.

Stikine River Provincial Park - Objectives and Strategies

To prevent unacceptable impacts of aircraft activity on mountain goats in the Grand Canyon of the Stikine River.

- Maintain current avoidance specifications for mountain goats in the Grand Canyon of the Stikine River:
  - ➢ Flying over the Stikine Canyon (Latham Creek to Telegraph Creek) is permitted at an altitude of greater than 1050 meters (3500 feet) above sea level.

  - Flying within the Stikine Canyon is permitted only from site Z (UTM 255422) to UTM 140447, and must be low in the canyon, and only when wind, visibility, and pilot skill permits. No hovering or circling is permitted to take place.
  - All efforts are to be made to avoid disturbing mountain goats occupying the area of site Z (UTM 255422).
  - Flying within the Stikine Canyon is prohibited during the kidding season May 15 to July 15.
- Monitor the effects of aircraft on the mountain goats for possible impacts and develop and implement additional management strategies if necessary.

Tatlatui Provincial Park - Objectives and Strategies

To manage aircraft access levels and patterns to maintain the wilderness experience of park visitors, and pilot safety.

- Encourage affected stakeholders to develop an acceptable strategy for dealing with current user issues in Tatlatui Provincial Park.

9.2.1.3 Roads

Land access into Stikine Country Protected Areas is limited because of the few roads in the region; the only two all weather roads are Highway 37 and the Telegraph Creek Road. Highway 37 provides access to a small part of Stikine River Provincial Park including the boat launch at the Highway 37 Bridge. The Telegraph Creek Road gives access to the westernmost parts of Stikine River Provincial Park.

The British Columbia Rail (BCR) railroad grade provides access near the southern and western parts of Spatsizi Plateau Wilderness Provincial Park; however, this route is subject to washouts. Although the railroad grade does not enter Spatsizi Plateau Wilderness Provincial Park, it substantially influences access to the park because it is drivable with four-wheel drive vehicles. The railroad grade also provides limited access to Stikine River Provincial Park. The unused BCR railroad bridge over the Stikine River remains unmaintained since its construction and needs engineering investigations to determine if it is safe.

The Willow Creek Forest Service Road comes to within two kilometres of the eastern boundary of Mount Edziza Provincial Park. Mineral exploration in the proposed Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) could result in improvement of the Willow Creek Road if mining does proceed. The Cassiar Iskut-Stikine LRMP recommended that a road be allowed through Mount Edziza Provincial Park if mine development is approved in the proposed Mount Edziza Resource Management Zone. A portion of Mount Edziza Provincial Park will be designated as the Mount Edziza Protected Area, to accommodate road construction if necessary. The Cassiar Iskut-Stikine LMRP also recommended road access through Pitman River Protected Area and Chukachida Protected Area, if necessary

The Omineca Mine Road, originating from Fort St. James, comes to within several kilometres of the eastern boundary of Tatlatui Provincial Park and near the Metsantan addition. This road is open but presently receives little use from provincial park visitors, likely because of the road's remoteness and the lack of facilities in the area. The potential exists for increased snowmobile use of this road, and access to Tatlatui Provincial Park and the Metsantan area.

General Management Direction

Overall Direction

New roads are prohibited within the protected areas, except for in Pitman River Protected Area, Chukachida Protected Area and the proposed Mount Edziza Protected Area as directed by the Cassiar Iskut-Stikine LRMP, to accommodate mineral access. A short spur road may be allowed in Stikine River Provincial Park near the Highway 37 Bridge to accommodate frontcountry outdoor recreation facility developments. Where new roads or improvements to existing roads are proposed adjacent to protected areas, Environmental Stewardship Division will work co-operatively with other agencies and First Nations to minimize and mitigate impacts on protected area natural, cultural heritage and outdoor recreation values. Where increased access on adjacent land is compatible with protected area objectives, Environmental Stewardship Division will seek to gain the greatest benefits while minimizing negative impacts.

Objectives and Strategies

To coordinate management of land-based access to Stikine Country Protected Areas with other agencies and First Nations to ensure that access does not impair the natural or cultural heritage values of the protected areas.

- Work with other agencies and First Nations to ensure that Environmental Stewardship Division is fully involved with any decisions regarding road building on adjacent lands that may affect Stikine Country Protected Areas.

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To ensure that Cassiar Iskut-Stikine LRMP guidelines are followed and impacts on Mount Edziza Provincial Park and proposed Mount Edziza Protected Area values are minimized and mitigated if a road is required through the proposed Mount Edziza Protected Area to the Mount Edziza Resource Management Zone (formerly Mount Edziza Recreation Area).

- Ensure application of Cassiar Iskut-Stikine LRMP guidelines if road development is required through the proposed Mount Edziza Protected Area. The following guidelines are extracted from the Cassiar Iskut-Stikine LRMP 2000:
  - *Manage public use of any new access cooperatively between BC Parks and the responsible agencies in consideration of the park management plan for Mount Edziza Provincial Park.*
  - *Recommend that a road be permitted through Mount Edziza Provincial Park in the event of mine development being approved in the Mount Edziza Resource Management Zone. For advanced mineral exploration e.g. bulk sampling, consider allowing roaded access through Mount Edziza Provincial Park where reasonable review determines that no practicable alternative exists. Any decision to put a road through the park should be accompanied by an appropriate public review process.*
  - *Locate roads and mine infrastructure to minimize disruption of wildlife, in particular mountain goats during kidding season and the use of spring and summer range by mountain ungulates.*
  - *If road access is required, plan road layout to minimize visual impacts from Nuttlude Lake (e.g. using forest screening).*

  - *Avoid disturbance of red- and blue-listed plants and plant communities when locating roads and mine infrastructure.*
  - *Avoid disruption of the mineral lick along Tennaya Creek.*
- Work with the mining company and other land management agencies to minimize and mitigate impacts from access, mining exploration and mining activities on Mount Edziza Provincial Park and proposed Mount Edziza Protected Area values.
- Install a gate on any road into and through the proposed Mount Edziza Protected Area. Deactivate the road after use associated with mining ends.

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To encourage maintenance of park access along the BCR railroad grade.

- Work with and explore partnerships with the Iskut First Nation, other agencies, commercial operators and NGOs in managing access along the BCR railroad grade.

To ensure that Cassiar Iskut-Stikine LRMP guidelines are followed regarding potential access into the Metsantan area.

- *Manage access into mineral tenures adjacent to the protected area to minimize disturbance of seasonal migration of caribou* (Cassiar Iskut-Stikine LRMP 2000).
- Work with other agencies and First Nations to manage access to mineral tenures adjacent to the Metsantan area.

Stikine River Provincial Park - Objectives and Strategies

To provide access to the Stikine River from Highway 37.

- Work with Ministry of Transportation to maintain access to the Stikine River at the Highway 37 Bridge.
- Consider road access to potential frontcountry type developments at the Highway 37 Bridge while avoiding unacceptable impacts to park values.
- Provide a pullout on the Telegraph Creek Road for access to the proposed initial trail to the Grand Canyon of the Stikine River. Provide additional pullouts for additional trails as required.
- The historical access of the owner of District Lot #371 (Willie Williams) along the existing road from Highway 37 (near the Stikine River Bridge) is recognized and will continue.

To ensure that the area around and including the BCR railroad bridge is safe.

- Work with BC Rail to determine the safety conditions at the BCR railroad bridge and implement any required measures.

Tatlatui Provincial Park and Spatsizi Plateau Wilderness Provincial Park (Metsantan addition) - Objectives and Strategies

To minimize and mitigate the effects of access from the Omineca Mine Road on protected area values.

- Work with other agencies and First Nations by participating in the planning and management of access on the Omineca Mine Road, to minimize and mitigate impacts of that access on Tatlatui Provincial Park.

Pitman River Protected Area and Chukachida Protected Area - Objectives and Strategies

To minimize and mitigate impacts to protected area values if access to mineral claims is required.

- Follow the Cassiar Iskut-Stikine LRMP guidelines if road development is required in the Pitman River Protected Area and Chukachida Protected Area. These guidelines are (Cassiar Iskut-Stikine LMRP 2000):
    - ➢ *In the event that a request is made for access and where reasonable review determines that no practicable alternative exists outside of the protected area, then government authorities will make a decision regarding the most appropriate access. The decision will be made in full consideration of the functional integrity of the protected area and the need for access for mineral activities, in accordance with applicable review and approval processes.*
    - ➢ *If a road is required, locate it to minimize environmental and wildlife impacts, including providing access controls if required. Fully deactivate road upon completion of operations.*
    - ➢ *Do not create a circle route as a result of providing access across this protected area.*
    - ➢ *The Pitman River has highly unstable terrain. If a road is required, recommend full bonding for road construction in recognition of the higher environmental risk.*
- Work with First Nations, mining companies and other agencies to minimize and mitigate impacts on protected area values from access, mining exploration and mining activities adjacent to the protected area.

9.2.1.4 Water

Motorboat Use

Motorboat use in the Stikine Country Protected Areas System includes jet and propeller driven boats.

General Management Direction

Overall Direction

Motorboat access is recognized as an ongoing use on many rivers and lakes within Stikine Country Protected Areas. Since maintaining a wilderness experience is a priority, motorboat use will be carefully managed at appropriate levels to ensure that impacts on natural, cultural heritage and wilderness values are minimized. Motorboat use will be allowed as a means of transportation but not as an outdoor recreation activity for its own sake. Other types of motorboat use such as jet-skis, hovercraft and air propelled watercraft are prohibited. It is recognized that maintaining existing motorboat access in the long term is important to people who access the protected areas system in this manner. Within the context of implementation of this plan, Environmental Stewardship Division will ensure that any proposed future changes in motorboat access will be discussed with affected users such as the Northwest Powerboat Association, commercial operators, the BC Wildlife Federation and other potentially affected user groups.

Motorboat Use on Rivers

Motorboat use on the Stikine River and its tributaries (the Pitman, Spatsizi, Klappan, and Chukachida rivers) occurs primarily in the autumn by hunters travelling to moose hunting areas. Motorboats have been used on most of these rivers for many years. The Spatsizi River upstream from Hyland Post is closed to motorboat traffic between spring break-up and September 1 of each year except for access for the guide-outfitter to Bear Camp for maintenance purposes. Potential interactions between motorized and non-motorized boaters on the river could be minimized through monitoring and, perhaps, trip scheduling management. Motorboating also occurs on portions of the Firesteel River in Tatlatui Provincial Park in support of guided angling activities.

Figure 17. Motorboat use on the Firesteel River, Tatlatui Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal3.htm

The Cassiar Iskut-Stikine LRMP issued management direction that BC Parks "*Continue to allow motorized boat use for recreation and hunting along the Stikine, Chukachida and Pitman rivers, consistent with acceptable types and levels of use*".

Objectives and Strategies

To provide motorboating opportunities consistent with acceptable types and levels of use.

- Manage motorboat use on rivers as a means of transportation.
- Maintain an appropriate balance between motorized and non-motorized uses, and minimize impacts on natural and cultural heritage values. In consultation with commercial operators, private users, Department of Fisheries and Oceans (DFO) and First Nations, develop management regimes to minimize negative interactions or environmental impacts if necessary. In the interim, allow motorboat access on rivers where motorboat use currently exists at current use levels.
- Consider commercial motorboat use on the Stikine River system above the Highway 37 Bridge only for drop-off and pick-up purposes of multi-day trips, and guide-outfitter support. Provide a limited number of trips by a maximum of 2 commercial operators.

- Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized uses.
- Encourage use of electric motors and four stroke motors in situations where they are feasible.
- Provide motorized and non-motorized users on rivers with information on river etiquette for operation of motorboats on rivers where floatcraft (i.e. canoe, kayak, inflatable raft) use also occurs. Include information on river etiquette and safety while navigating through Jewel Rapids and Beggerlay Canyon.
- Maintain the non-motorized use restriction on the Spatsizi River upstream of Hyland Post from breakup to September 1. One exception is provided to allow the guide-outfitter to access Bear Camp for maintenance purposes.

To provide high quality wilderness motorboating opportunities to experienced boaters.

- Monitor user experience and site impacts, and establish controls on river use, if needed, to maintain visitor satisfaction. Possible controls include numbers of groups, group size, trip timing, and number of trips/day.

Motorboat Use on Lakes

Motorboating occurs on several lakes in Stikine Country Protected Areas, primarily by commercial operators for guided hunter or angler transport. BC Parks also has a motorboat on Cold Fish Lake for use by authorized personnel and volunteers. Motorboat use presently occurs on Buckinghorse, Buckley, Bug, Chapea, Chukachida, Cold Fish, Ella, Hotlesklwa, Kitchener, Laslui, Mess, Mowdade, Nuttlude, Pitman, Stalk, Tatlatui and Tuaton lakes. The boats are generally small runabouts with small outboard engines, and are based on the lakes where they are used. Presently no lakes in Stikine Country Protected Areas are accessible by road, preventing easy access to lakes for motorboat use.

Objectives and Strategies

To provide motorboat use opportunities consistent with acceptable types and levels of use.

- Manage motorboat use on lakes as a means of transportation.
- Maintain an appropriate balance between motorized and non-motorized uses, and minimize impacts on natural and cultural heritage values. In consultation with commercial operators, private users, DFO and First Nations, develop management regimes to minimize conflicts or environmental impacts if necessary.
- Work with commercial operators to minimize the use of motorboats on lakes in Stikine Country Protected Areas.
- Encourage the use of electric motors and four stroke motors on lakes that allow motorboat use.
- Maintain the BC Parks motorboat at Cold Fish Lake for management and safety purposes, and park host use only.

9.2.1.5 Snowmobiles

The *Park Act* and its regulations generally prohibit the use of snowmobiles in protected areas except under specific authorization. In Stikine Country Protected Areas, trapline holders are allowed to use snowmobiles, and some guide-outfitters have had permission to use snowmobiles for firewood collection. The Cassiar Iskut-Stikine LRMP recommended that snowmobile use continue along the Klastline Trail. No other snowmobile access authorizations currently exist within Stikine Country Protected Areas.

General Management Direction

Overall Direction

Access to Stikine Country Protected Areas by snowmachine users will generally be restricted and require specific authorization. Limited snowmobile access for First Nations traditional uses, for access along the Klastline Trail, for traplines holders, and for guide-outfitters for camp maintenance will continue.

Objectives and Strategies

To provide for limited snowmachine access while avoiding unacceptable impacts to wildlife populations and other protected area values.

- Work with First Nations, trapline holders and guide-outfitters to minimize the impacts of continued limited snowmachine access on natural, outdoor recreation and cultural heritage values.

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To recognize snowmobile use along the Klastline Trail in the Klastline Management Area.

- Work with the Tahltan Band Council and the Iskut First Nation to develop snowmobile use guidelines along the Klastline Trail in the Klastline Management Area.

9.2.2 Facilities

Various types of facilities exist in Stikine Country Protected Areas. Facility management, including improvements and development, is important in managing the overall level of facilities in these wilderness protected areas. Facilities include structures, trails and routes, and campsites. The following definitions apply:

- Facilities include all structures, trails, routes, and campsites.
- Trails and routes include bridges and boardwalks and any other similar trail improvements.
- Structures include shelters (cabins, tent frames), sheds, and any other constructed item other than trail improvements.

9.2.2.1 General Management Direction

Overall Direction

In general, the management objective is to have the fewest facilities required to support public, First Nations, and commercial use of the Stikine Country Protected Areas System. This is consistent with maintaining the wilderness character of the system. Commercial structures will be directed outside protected areas where feasible and public facilities will be consistent with maintaining a wilderness experience. Facilities that are unsafe, no longer used or not required for emergency purposes and not of significant historical or cultural heritage value will be removed.

The use of facilities (permanent and non-permanent) and the land base within Stikine Country Protected Areas as staging areas for mineral, industrial or other activities that are conducted primarily outside the protected areas system will not be permitted.

9.2.2.2 Structures

Structures have been built within Stikine Country Protected Areas for many reasons. Most structures support guide-outfitting, angling guiding and trapping. Environmental Stewardship Division maintains several structures, such as those at Cold Fish Lake camp. Traditional First Nations structures such as those at Metsantan Lake also exist.

The Tahltan Nation indicates that traditionally, Tahltans occupied the current Cold Fish Lake campsite with a temporary camp (as evidenced by obsidian flakes and pieces) and that a trapping cabin owned by Alec Dennis was burned down in 1948. The present camp on Cold Fish Lake was established in 1948 for guided hunting purposes and Tommy Walker subsequently acquired fee simple title to the site. Currently, the National Second Century Fund of British Columbia (Nature Trust of British Columbia) owns the 84 ha private lot at Cold Fish Lake camp along with the original Tommy Walker Cabin; the Province of British Columbia owns all other buildings at Cold Fish Lake camp and has a 99-year lease from Nature Trust on the property and the Tommy Walker Cabin. One of the conditions of the lease is that the site is to be preserved as "*a site of ecological interest for the use, enjoyment and benefit of the people of British Columbia.*" Efforts have been made to at least partially restore some of the buildings to prevent further deterioration.

Map 4 and Appendix 10 provide descriptions of the type and location of structures currently found within the Stikine Country Protected Areas System.

Figure 18. Cold Fish Lake camp, Spatsizi Plateau Wilderness Provincial Park

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal3.htm

General Management Direction

Overall Direction

Structures will be carefully managed and controlled within Stikine Country Protected Areas. Shelters, including cabins and tent frames or other structures, will be considered only where their existence is consistent with zone prescriptions and management area objectives. Purpose statements will be developed for structures included in park use permits and will define allowable uses of those structures; changes to defined uses will require pre-approval. For the Klastline and Metsantan additions, Stikine River Provincial Park, Chukachida Protected Area and Pitman River Protected Area, the Cassiar Iskut-Stikine LRMP directed that cabins can be built to support backcountry recreation and that opportunities for frontcountry tourism development near the Highway 37 Bridge be provided. The Cassiar Iskut-Stikine LRMP provided the following direction: "*Generally, physical commercial infrastructure (e.g. roads, lodgings, staging areas, etc.) will be directed outside of protected area boundaries in order to minimize impacts within Protected Areas*" (Cassiar Iskut-Stikine LRMP 2000). New shelters will be considered in the form of small, rustic backcountry shelters such as tent frames and small cabins. Present structures can be maintained, provided the structures are still required. Lodge and other structures may be considered subject to an appropriate review process approved by the Minister of Water, Land and Air Protection.

Objectives and Strategies

To keep infrastructure development to a minimum level appropriate for wilderness protected areas.

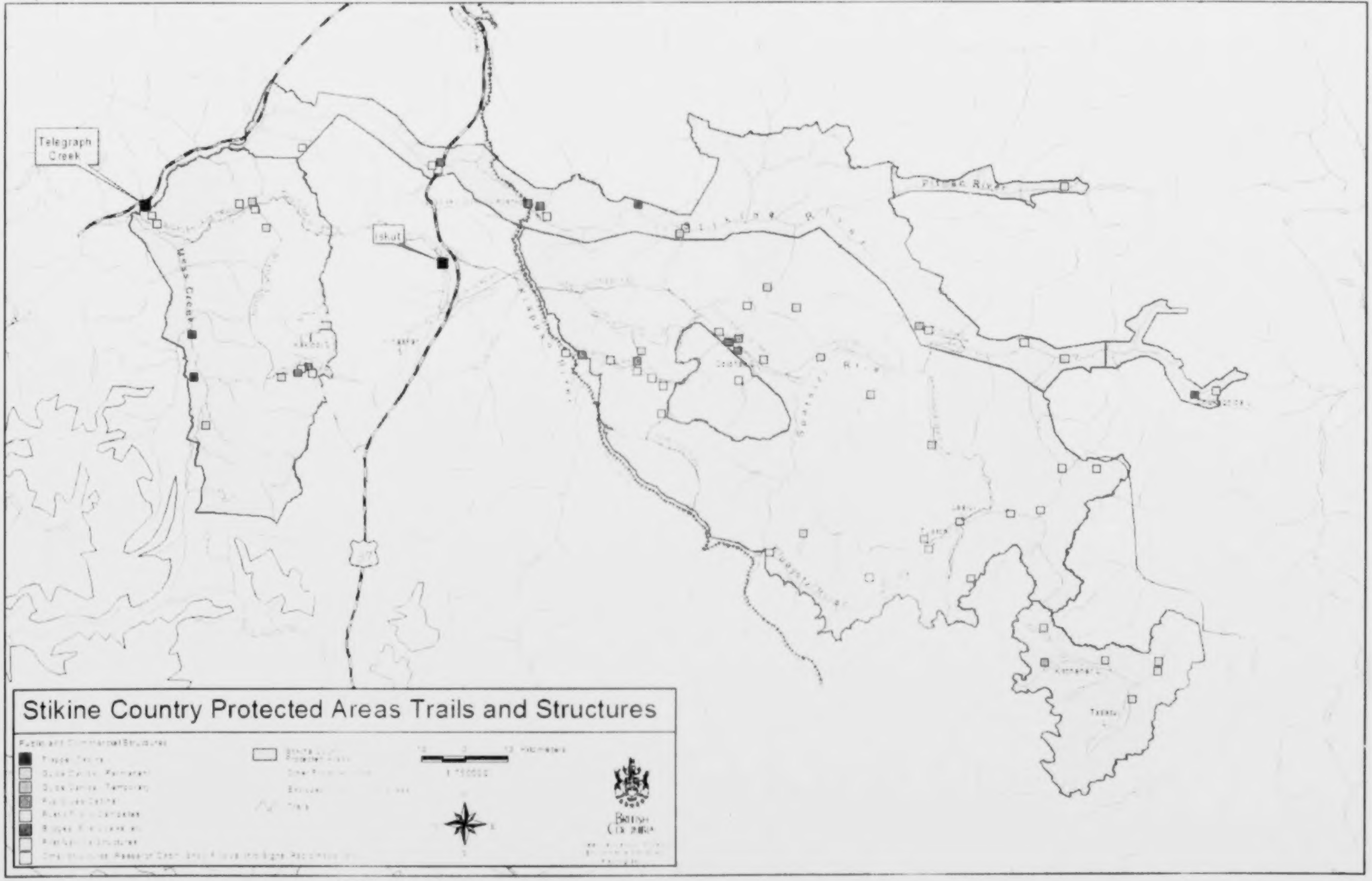
- Consider construction of structures in new locations or additions to existing camps subject to the following conditions:
  - ➢ must be consistent with management plan zone prescriptions and management area objectives;
  - ➢ must undergo an impact assessment following BC Parks Impact Assessment Process and have a minimal footprint on the land; and,
  - ➢ must be located in one of the following management areas (see Section 10.2 for a description of each management area):
    - ⇨ Buckley Lake (west of Mess Creek only);
    - ⇨ Klastline:
    - ⇨ Kakiddi Lakes;
    - ⇨ Mount Edziza Protected Area (proposed);
    - ⇨ Stikine Grand Canyon (Wilderness Recreation Zone only)
    - ⇨ Middle Stikine;
    - ⇨ Chukachida;
    - ⇨ Pitman River;
    - ⇨ Metsantan (for First Nations cultural and interpretive purposes only); and,
    - ⇨ Stikine Headwaters.

  New shelters will be considered in the form of small, rustic backcountry shelters such as tent frames and small cabins. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities. For the Buckley Lake Management Area east of Mess Creek, new structures will be considered only in the form of non-permanent shelters.

Map 4. Stikine Country Protected Areas Trails and Structures.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/approved/map04_trails.pdf

Map 4



Stikine Country Protected Areas Trails and Structures

Telegraph Creek
Iskut
Mess Creek
Stikine River
Klappan River
Spatsizi River
Pitman River
Public and Commercial Structures
Trails
10 0 10 Kilometres
British Columbia

- Consider construction of new structures to support the exercise of existing aboriginal rights and traditional uses.
- Allow maintenance of and upgrades to existing permanent commercial camps, subject to BC Parks Impact Assessment Process, provided bed capacity for clients remains the same. Upgrades may include improved services (e.g. showers) or upgrading of existing structures (i.e. tent frame to cabin) but not additions of new structures to increase bed capacity. The following existing permanent commercial camps are recognized:
  - guide-outfitter camp on Bug Lake;
  - guide-outfitter camp on Laslui Lake;
  - guide-outfitter camp on Buckinghorse Lake;
  - guide-outfitter camp on the Stikine River (just downstream from the mouth of the Spatsizi River);
  - guide-outfitter camp on Kitchener Lake;
  - guide-outfitter camp on Stalk Lake;
  - guide-outfitter camp on Buckley Lake;
  - angling guide camp on Tatlatui Lake; and,
  - angling guide camps (2) on the Firesteel River.
- Consider proposals for increased bed capacity of existing facilities to support an increased number of guides for increased guide to client ratios on an individual basis.
- Allow maintenance of and upgrades to existing public structures including Cold Fish Lake Camp, the Kitchener Lake cabin and the Stikine River cabin, subject to BC Parks Impact Assessment Process.
- Establish standards for cabins and other facilities as necessary that are consistent with facility management policies of Environmental Stewardship Division.
- Remove facilities that are unsafe, no longer used or not required for emergency purposes and not of significant historic or cultural heritage value.
- At the owner's expense, remove structures built or upgraded without prior written approval.
- Ensure that some lakes accessible by floatplanes remain free of structures to preserve wilderness quality for outdoor recreation users.

Protected Area-Specific Management Direction

Chukachida Protected Area, Pitman River Protected Area, Stikine River Provincial Park and Spatsizi Plateau Wilderness Provincial Park (Upper Stikine and Metsantan Management Areas) - Objectives and Strategies

To maintain the wilderness character of the protected areas while allowing some outdoor recreation development.

- "*Allow opportunities for construction of backcountry cabins, as required, to support recreational use, compatible with protected area values*." (Cassiar Iskut-Stikine LRMP 2000).

Gladys Lake Ecological Reserve - Objectives and Strategies

To facilitate research within the Gladys Lake Ecological Reserve while discouraging outdoor recreation use.

- Allow use of the Gladys Lake cabin only for research and management purposes and remove mention of the Gladys Lake cabin from all protected area brochures and the official Ministry of Water, Land and Air Protection web site to discourage outdoor recreation use.
- Review the need for maintenance of the Gladys Lake cabin for research purposes and assess the level of unauthorized recreation use of the cabin.

Mount Edziza Provincial Park (Klastline Management Area) - Objectives and Strategies

To maintain the wilderness character of the park while allowing some outdoor recreation development.

- "*Maintain opportunities for construction of cabins, as required, to support recreational use along the Klastline Trail.*" (Cassiar Iskut-Stikine LRMP 2000)

To provide access over the Klastline River.

- Review bridge placement options over the Klastline River in consultation with the Tahltan Band Council and the Iskut First Nation and construct a bridge if funding is available.

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To manage facilities at the Metsantan village site.

- Work with the Tahltan Band Council and Iskut First Nation to develop a policy for the Metsantan Site with respect to protection and possible rehabilitation of the traditional village site.
- Consider new structures for cultural and interpretive purposes only, subject to an impact assessment following BC Parks Impact Assessment Process.

To manage facilities at Cold Fish Lake.

- Consider a range of opportunities that would result in self-sustaining maintenance of the Cold Fish Camp facilities, which retain traditional and historic values and provide for continued public use. Opportunities may include:
    - increased user fees;
    - public/private sponsorship; and,
    - operation of the facilities by the Tahltan Nation, NGOs and/or other public groups or partnerships.

  Any proposals would be considered in conjunction with the Nature Trust of British Columbia, the Tahltan Nation, and the proposed Stikine Country Protected Areas Advisory Committee.
- Maintain Cold Fish Lake Camp for its historical value and with a priority for public outdoor recreation use.
- Work with the Tahltan Nation to implement a cultural heritage signage and interpretation program at Cold Fish Lake camp.
- Allow maintenance of and upgrades to Cold Fish Lake camp, subject to BC Parks Impact Assessment Process.

Stikine River Provincial Park - Objectives and Strategies

To provide frontcountry outdoor recreation opportunities near the Stikine River Bridge.

- "*Allow opportunities for frontcountry tourism development in the vicinity of the Stikine bridge on Highway 37.*" (Cassiar Iskut-Stikine LRMP 2000)

Tatlatui Provincial Park - Objectives and Strategies

To provide an opportunity for an additional hunting guide tent frame or cabin.

- Consider allowing an additional structure in Tatlatui Provincial Park to support guided hunting activities only, subject to BC Parks Impact Assessment Process, BC Parks Design Guidelines, consultation with affected users, and no significant impacts on other existing operations in the park. Other new structures will not be considered in Tatlatui Provincial Park.

9.2.2.3 Trails, Routes and Campsites

Trails and routes fit into two categories: trails used to access protected areas, and those within protected areas. Trails are often used by both foot and horse traffic. Two trails that provide access to Mount Edziza Provincial Park are the Klastline Trail from Iskut, and the Mowdade Trail from Kinaskan Lake. The Kluachon-McEwen Creek Trail provides access to Spatsizi Plateau Wilderness Provincial Park from Iskut.

Several maintained trails (mostly rustic) and numerous routes exist within Stikine Country Protected Areas. Spatsizi Plateau Wilderness Provincial Park contains maintained trails at Eaglenest Creek, McEwan Creek, Black Fox Creek, Cold Fish Lake, Danihue Pass and Spatsizi Plateau; and portage trails at Didene Creek, Fountain Rapids, Chapea Rapids, and Beggerlay Rapids. Mount Edziza Provincial Park contains maintained trails including the Mount Edziza Trail between Buckley and Mowdade lakes, and the Buckley Lake Trail from Telegraph Creek to Buckley Lake. Established routes/trails in Spatsizi Plateau Wilderness Provincial Park include: Airplane Valley, Cartmel Lake, Gladys Lake, Hyland Post, Icebox Canyon, Mink Creek and Ram Creek trails; and Hotlesklwa Lake, Ross River, Tahltan, Tuaton Lake and Upper Stikine historical routes. The Spectrum Route from Little Ball Lake or Arctic Lake to the Mount Edziza Trail is the only established route that exists in Mount Edziza Provincial Park.

All trails in the Stikine Country Protected Areas System are Class IV trails and all routes are Class V trails according to the BC Parks' Facility Standards. Class IV trails are intended in Wilderness Recreation zones as lightly used wilderness trails (overnight or multi-day duration trips), which do not normally have support facilities such as developed campsites; designated camping areas and/or backcountry toilets may be provided as required. Class V trails in Wilderness Recreation and Conservation zones are intended as wilderness routes (overnight or multi-day duration trips). Class V trails are simply routes with no trail development and signs and camping locations may be restricted as required.

Campsites have been built in numerous locations throughout Stikine Country Protected Areas by many different user groups. Some campsites have seen heavy use with deterioration of site quality. Several of these sites are on the Stikine River and are used by various river user groups.

The Cassiar Iskut-Stikine LRMP provided direction regarding trails in some new protected areas (see below).

General Management Direction

Overall Direction

Environmental Stewardship Division will continue to provide for maintenance of the main trails within Stikine Country Protected Areas. Secondary trails and new trails, routes and campsites will only be established or maintained to meet specific outdoor recreation goals. All new trails must undergo an evaluation under the BC Parks Impact Assessment Process. Development, maintenance and use of all trails, routes and campsites will be consistent with protected areas management plan zoning and conservation goals. Environmental Stewardship Division will work with other organizations and commercial operators (e.g. guide-outfitters, recreation guides) to maintain or upgrade protected area trails.

Objectives and Strategies

To maintain trails, routes and campsites at a minimum wilderness standard. If use levels have unacceptable impacts, consider improving, relocating, upgrading or closing them.

- Conduct periodic impact assessments of trails and campsites.
- Provide for maintenance of existing trails and campsites within the protected areas at current levels while allowing for rerouting or closures for specific reasons such as protecting natural or cultural heritage values.
- Pursue partnerships with other organizations and commercial operators (e.g. guide-outfitters, recreation guides) to assist with trail maintenance.
- Investigate the potential for designating some trails or portions of some trails as horse-only or hiking-only trails and if necessary, develop new trails subject to the BC Parks Impact Assessment Process.
- Continue to monitor the condition of campsites and trails and implement strategies to rehabilitate damaged areas and to avoid further impacts.

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To protect the plant communities and physical features of the cinder cones and calcite deposits in Mount Edziza Provincial Park.

- On Eve Cone, mark and restrict access to the established route up the cinder cone.
- Provide information to park visitors on the sensitivity of cinder deposits and associated lichen crust communities.
- Monitor the effects of hiking use on the cinder cones and restrict access to designated trails or prohibit access, if necessary, to protect natural values.
- "*Provide designated trails to minimize impacts to calcite deposits.*" (Cassiar Iskut-Stikine LRMP 2000).
- Provide information to park visitors on the fragility of the Mess Creek hot springs calcite deposits.

Gladys Lake Ecological Reserve - Objectives and Strategies

To protect the values of the Gladys Lake Ecological Reserve while allowing specific access to Spatsizi Plateau Wilderness Provincial Park.

- Allow access to the ecological reserve by foot only except for horse travel along the following specific trails - Eaglenest Creek Trail through Danihue Pass, Icebox Canyon Trail, Waterfall Creek Trail and Paramount Trail (see Appendix 12 for a map showing designated trails in Gladys Lake Ecological Reserve). Reasonable maintenance of these trails will be allowed subject to prior agreement on the type and extent of maintenance.
- Conduct regular impact assessments on the Eaglenest, Icebox Canyon, Waterfall Creek and Paramount trails to ensure that hiking and horse use do not result in unacceptable impacts on ecological reserve values. If necessary, close or relocate portions of trails to avoid further impacts while accommodating continued hiking and horse access to areas beyond the reserve.
- Discontinue maintenance of the Gladys Lake Trail and remove references to the trail from all protected area brochures and the Ministry of Water, Land and Air Protection website to discourage outdoor recreation use.
- Allow the Airplane Creek Trail to remain open to hiking use subject to ongoing assessments of impacts on or conflicts with ecological reserve values.

Spatsizi Plateau Wilderness Provincial Park and Stikine River Provincial Park - Objectives and Strategies

To monitor impacts at campsites and trails along the Stikine River.

- Continue to monitor commercial and recreation use impacts on campsites and trails.
- Develop a site plan to assess and manage heavily used trails and campsites (e.g. Fountain Rapids).
- Assess the extent and impacts of unauthorized camps (e.g. along the Stikine River downstream from the mouth of the Spatsizi River), and develop site plans as needed. Site plans could include maintenance standards, cleanup requirements, etc. If necessary, remove some sites and designate formal camping areas.
- Encourage all river users to practice no-trace camping techniques.

Stikine River Provincial Park - Objectives and Strategies

To establish viewing opportunities over the Grand Canyon of the Stikine River as recommended by the Cassiar Iskut-Stikine LRMP.

- "*Allow a range of frontcountry to backcountry viewing opportunities along the Grand Canyon of the Stikine*" (Cassiar Iskut-Stikine LRMP 2000).
- "*Locate trails to viewing areas to minimize potential for disturbance of mountain goats*" (Cassiar Iskut-Stikine LRMP 2000).
- Initially, develop one trail or route to the Grand Canyon of the Stikine River, subject to conducting an impact assessment following the BC Parks Impact Assessment Process to avoid unacceptable impacts on mountain goat populations, or on plants or plant communities at risk, from viewing activities and trails.

To provide an opportunity for half to full day frontcountry hiking trips.

- Investigate developing a trail for half to full day frontcountry hiking trips and/or an interpretive trail in the Stikine River Bridge area.

9.2.3 Outdoor Recreation

Outdoor recreation is an important component of management of Stikine Country Protected Areas. Visitors to the protected areas expect a high quality wilderness experience with few encounters with other users. Knowledge of outdoor recreation use levels within Stikine Country Protected Areas is limited at present for unguided visitors, which is partly because of self-registration at remote access points. Better user information would assist protected area managers in detecting changes in use patterns and in determining appropriate use levels.

Currently, issues of overcrowding or unacceptable impacts on natural or cultural heritage values caused by outdoor recreation use are few. However, as in most major protected area systems, use levels are expected to increase over time and, as a result, impacts to natural, cultural heritage, or outdoor recreation values may occur.

Current use levels in Stikine Country Protected Areas are relatively low, estimated at about 900 visitors per year, including all activities associated with commercial and public recreation. First Nations traditional use levels are not included in this estimate. Over the next 20 years, demand for outdoor recreation is expected to increase. At the same time, First Nations traditional activities are expected to increase as First Nations reconnect with protected areas in their traditional territories.

General management direction for outdoor recreation applies to all outdoor recreation activities, including hunting and angling. See sections 8.5.3 and 8.6 for management direction on levels of harvest for hunting and angling respectively.

9.2.3.1 General Management Direction

Overall Direction

Outdoor recreation management will focus on providing a range of outdoor recreation experiences in a wilderness setting. Experiences will range from facility-based outdoor recreation near Highway 37 to recreation experiences where quiet and solitude prevail. Recreation use must not compromise the ecological values of the protected areas, and must respect cultural heritage values. Appropriate outdoor recreation activities include camping, picnicking, hiking, mountaineering, canoeing, kayaking, rafting, horse travel, hunting, photography, nature appreciation, cultural heritage appreciation, wildlife viewing, fishing, cross-country skiing, ski touring and snowshoeing. Some of these activities will be restricted to certain areas. Limited snowmobile use will continue in support of First Nations' traditional uses, trapping and camp maintenance for guide-outfitters. In general, commercial and public opportunities (except hunting and angling which are regulated under the *Wildlife Act*) will be in balance where use levels are limited. Competitive outdoor recreation events are considered inappropriate for these protected areas. Protected area values described in this management plan will guide authorizations for other outdoor recreation activities.

The priority for increased use will be for non-motorized, non-mechanized and low impact activities that have minimal impact on natural and cultural values and on the wilderness qualities of the Stikine Country Protected Areas System. Despite relatively low use levels overall, localized high use areas will be carefully managed and use will be curtailed if necessary. Maximum levels of use or carrying capacities will be established over time in consultation with affected user groups for specific activities and /or for specific portions of the protected areas system. In the interim, maximum numbers of commercial opportunities for various activities are established in Section 12 of the plan.

Objectives and Strategies

To provide high quality wilderness recreation opportunities to backcountry visitors.

- Monitor levels of use and visitor satisfaction to determine if use limits or other controls need to be implemented.
- Collect more detailed information on outdoor recreation use levels and trends.

To ensure that outdoor recreation activities do not have unacceptable impacts on the fish and wildlife populations, cultural heritage values, plant species and plant communities at risk, other vegetation, and physical features in the Stikine Country Protected Areas System.

- Monitor the impacts of outdoor recreation activities and facilities on natural and cultural heritage values and implement measures to reduce unacceptable impacts if necessary.
- Conduct site assessments to determine if campsite locations conflict with cultural heritage values.
- Designate campsites, if needed, to avoid impacts on sensitive sites.
- Educate protected area visitors on minimal impact/no trace camping techniques. Implement regulations/guidelines as appropriate.
- Maintain group sizes at current levels to ensure a quality outdoor recreation experience and curtail site damage. Group sizes for parties in the field currently do not exceed ten persons including all guides and employees, except for river rafting or canoe trips where group size can be up to 15 people, including all guides and employees. Upon application and approval by Environmental Stewardship Division, group size for individual trips may be increased if a commercial operator employs an approved fulltime interpreter delivering an approved program, for a large family group, or occasionally for an approved trainee.
- Work with First Nations and users to develop strategies to reduce or eliminate damage where outdoor recreation use impinges on First Nations' traditional uses or cultural heritage sites.

To enhance the backcountry visitors' awareness of First Nations and pioneer cultural heritage, natural history, wildlife etiquette, and bear encounter avoidance techniques.

- Employ educational programs to increase visitor awareness of natural and cultural history, and bear avoidance, where feasible.

To minimize conflicts between outdoor recreation users.

- Monitor visitor satisfaction of outdoor recreation user groups and develop strategies to minimize conflicts between recreation user groups, if required.

9.2.3.2 Backcountry Hiking and Mountaineering

The gentle relief of the plateaus in Spatsizi Plateau Wilderness and Mount Edziza provincial parks provides opportunities for wilderness backcountry hiking within these protected areas. More adventurous hikers and mountaineers may prefer the rugged terrain of the Eaglenest Range in Spatsizi Plateau Wilderness Park and the Spectrum Range and the Mount Edziza massif in Mount Edziza Provincial Park. The difficult access to the protected areas means that most hiking parties that enter the protected areas do so for multi-day trips. The remoteness of the protected areas from population centres and local highways restricts the number of users.

Visitors commonly use several routes and trails within Stikine Country Protected Areas. These routes and trails are not well developed or marked, so good map reading and navigation skills are essential. The hiking season can be extremely short in the area because of the persistence of snow accumulations into the summer and the arrival of new snow in early autumn. Storms can bring significant snowfalls at any time of year so visitors need to be prepared for all conditions.

Figure 19. Hiking in Spatsizi Plateau Wilderness Provincial Park

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal3.htm

General Management Direction

Overall Direction

Backcountry hiking and mountaineering will continue and emphasis will be placed on providing high quality wilderness experiences to visitors without unacceptable impacts on natural and cultural heritage values.

Objectives and Strategies

To provide high quality wilderness backcountry hiking and mountaineering opportunities.

- Maintain levels of hiking and mountaineering use that are appropriate for wilderness areas through monitoring of visitor satisfaction levels and implementing use controls if necessary.

- Limit activity where necessary to protect natural, cultural heritage and outdoor recreation values.

9.2.3.3 Floatcraft

The Stikine River and its tributaries provide high quality white-water canoeing, kayaking and rafting opportunities. These trips start at either the headwaters of the Stikine River on Laslui Lake or Tuaton Lake, or at Didene Creek on the Spatsizi River, and require the paddlers to be skilled and self-reliant. Use levels on these rivers are relatively low at this time; however, some concern exists about impacts to high use areas such as the portage trails and campsites at portages. These areas may require management action to prevent unacceptable impacts from occurring. For commercial floatcraft operators on the Stikine and Spatsizi rivers east of Highway 37, maximum group size is 15 including guides.

Figure 20. Canoeing down the Spatsizi River, Spatsizi Plateau Wilderness Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal3.htm

The Kakiddi Lakes chain is beginning to receive attention from canoeists, but use is low. Little information about this trip is presently available, and portage trails and campsites may need to be developed. The Kakiddi Lakes chain trip is less technical than the river trips.

Potential opportunities exist to increase use, including commercial use, of the rivers in Stikine Country Protected Areas for trips by floatcraft without adversely affecting natural, cultural heritage and wilderness values. Possible trips include day trips from Klappan River Bridge to the Highway 37 Bridge, and multi-day trips down the Stikine and Spatsizi rivers, and on the Kakiddi Lakes chain.

General Management Direction

Overall Direction

Canoeing, kayaking and rafting will continue as self-supported wilderness activities. Impact monitoring will continue to assess use impacts at popular sites.

Objectives and Strategies

To provide high quality private and commercial wilderness rafting and canoeing opportunities.

- Consider new commercial floatcraft outdoor recreation opportunities.
- Pending establishment of maximum use levels or carrying capacity, no more than 4 commercial trips will be permitted for each 8 day period down the Stikine and Spatsizi rivers combined, and no more than 4 commercial trips will be permitted for each 8 day period on the Kakiddi Lakes chain.
- Monitor user experiences and site impacts, and establish additional controls if needed to maintain visitor satisfaction and ecological values. Possible controls include numbers of groups, group size, trip timing, and number of trips/day.
- Provide floatcraft users with information on river etiquette for operation of floatcraft on rivers where motorboat use also occurs. Include information on river etiquette and safety while navigating through Jewel Rapids and Beggerlay Canyon.

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To provide wilderness canoeing opportunities on the Kakiddi Lakes chain.

- Evaluate the potential of the Kakiddi Lakes chain as a canoe route.
- Conduct impact monitoring along the lake chain at the initial stages of visitor canoe use of this route.

Stikine River Provincial Park and Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To provide non-motorized user groups with wilderness experiences that include few interactions with motorized users.

- Encourage non-motorized users to travel at times when the chance of meeting motorboats will be minimal and provide information about motorized use to non-motorized users. (See Motorboat Use on Rivers Section 9.2.1.4).
- Maintain the non-motorized use restriction on the Spatsizi River upstream of Hyland Post from breakup to September 1. One exception is provided to allow the guide-outfitter to access Bear Camp for maintenance purposes.

9.2.3.4 Winter Recreation

Opportunities for backcountry ski touring exist in Stikine Country Protected Areas but current use is low because of the region's remoteness. Commercial operators offer trips at Hyland Post, Laslui Lake and Tatlatui Lake, and some private fly-in use of Cold Fish Lake camp occurs. Opportunities exist to increase non-motorized winter recreation in Stikine Country Protected Areas, especially in Spatsizi Plateau Wilderness Provincial Park and Tatlatui Provincial Park, where support facilities exist. Snowmobile use is currently restricted to First Nations traditional use, trapline use, camp maintenance, and outdoor recreation use on the Klastline Trail.

General Management Direction

Overall Direction

Winter outdoor recreation will be non-motorized except for on the Klastline Trail. Heli-skiing is prohibited in all protected areas in the Stikine Country Protected Areas System. Habitat mapping will be used to direct winter use to suitable areas away from important winter ranges, and impacts of winter recreation on wildlife will be monitored. Snowmobile use will continue to be restricted to First Nations traditional use, trapline use, camp maintenance, and outdoor recreation use on the Klastline Trail in the Klastline area. Limited opportunities for dog sledding will be considered in addition to traditional use of dog sledding by First Nations to exercise existing aboriginal rights.

Objectives and Strategies

To provide safe non-motorized winter recreation opportunities that do not incur unacceptable impacts on wildlife or their critical winter range.

- Map critical wildlife winter range areas and restrict access in these areas.
- Monitor the impacts of winter recreation on wildlife.
- Consider allowing a limited number of opportunities for dog sledding by permit only. Initial dog sledding opportunities will be monitored for impacts to protected area values.
- Dogs used for sledding trips must be under the care of a licensed veterinarian. For each dog used for the sledding program the owner must provide, in the form of a health certificate or similar document signed by the veterinarian, evidence that the dog is:
    - ➢ free of infectious diseases of canids;
    - ➢ has a current vaccination for infectious diseases of canids; and,
    - ➢ is under a current prophylactic program for the control of internal parasites of canids.

Protected Area-Specific Management Direction

Stikine River Provincial Park, Spatsizi Plateau Wilderness Provincial Park and Tatlatui Provincial Park - Objectives and Strategies

To facilitate non-motorized winter outdoor recreation activities.

- Consider new commercial non-motorized winter recreation opportunities.

9.2.3.5 Horse Use and Pack Animals

First Nations, guide-outfitters and private groups have historically used horses for transportation and as pack animals within Stikine Country Protected Areas for hunting and non-consumptive outdoor recreation trips. Other species of pack animals have not been used in these protected areas and there is concern about possible disease transmission to wildlife from other species such as llamas. Concern also exists about the impact of horses on some of the trails in the protected areas. Under existing regulations, horse users are required to have authorization from the Environmental Stewardship Division before travelling in Stikine Country Protected Areas.

General Management Direction

Overall Direction

Horses are recognized as an acceptable means of travel within Stikine Country Protected Areas in support of high quality wilderness recreation. The prohibition on other species of pack animals will continue in recognition of the risk to wildlife species. Use levels for horses will be monitored to determine impacts to trails and vegetation, and controls will be implemented if necessary.

Figure 21. Horse use, Spatsizi Plateau Wilderness Provincial Park.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/photogal/stikineMP_gal3.htm

Objectives and Strategies

To minimize the risk of disease transmission from pack animals to wildlife.

- Allow only horses (i.e. equines) to be used as pack animals.

To prevent unacceptable impacts caused by horse use in Stikine Country Protected Areas.

- Continue horse use on designated trails only, subject to prior authorization.
- Allow concentrated feed pellets and certified weed free hay to be the only feed brought into Stikine Country Protected Areas.
- In consultation with commercial operators, First Nations and other users, apply seasonal limitations or other restrictions on horse use, if needed, to prevent trail damage.
- Survey protected areas for introduced plant species.
- Complete trail impact surveys and monitor plants and plant communities at risk near trails.

- Implement a maximum group size of 14 horses for commercial operators and private users (14 horses would normally accommodate a six to eight person trip given the need for pack horses). Guide-outfitters may exceed maximum group size only at the beginning and end of the season for trailing horses in and out for the season, subject to approval in their permit.

To determine the effects of horse use on natural values.

- Evaluate areas of concentrated horse use (e.g. guide-outfitter camps) and develop strategies to minimize impacts of horse use if required.

9.2.3.6 Other Outdoor Recreation Activities

Interest in other outdoor recreation activities, such as mountain biking, may arise for Stikine Country Protected Areas in the future. Because it is difficult to plan for all future outdoor recreation possibilities, the precautionary principle will be applied where potential risk to natural, cultural heritage and outdoor recreation values exist. Stikine Country Protected Areas will remain closed to ATV use for outdoor recreation purposes.

General Management Direction

Overall Direction

Mechanized and motorized ground travel of any type, except those provided for in this management plan, are generally considered to be incompatible with the wilderness values of Stikine Country Protected Areas. Commercial or competitive sporting events and aerial sports, such as but not limited to hang-gliding and para-penting, are also considered inappropriate.

Objectives and Strategies

To prohibit mechanized or motorized uses other than motorboats and floatplanes and snowmobiles where authorized.

- Consider limited opportunities for uses such as mountain bikes adjacent to Highway 37 subject to a full impact assessment.
- Continue to prohibit ATV use in Stikine Country Protected Areas.

9.2.4 Fuel handling and storage and waste management

Motorized transportation in support of outdoor recreation activities in Stikine Country Protected Areas requires the use and storage of fuel. The remote nature of the protected areas means that fuel must be transported to and stored on site where operations are based. Propane is also used to run cooking facilities, refrigerators and lights at some of the larger base camps. Currently, the fuel storage and handling guidelines apply to only one commercial operator in Stikine Country Protected Areas (Appendix 12). No guidelines are in place for propane storage and handling.

Waste management is also a concern at some of the larger base camps where garbage and human waste is more concentrated. Waste management guidelines that apply for most permitted base camps are found in Appendix 12.

9.2.4.1 General Management Direction

Overall Direction

Guidelines will be developed to manage commercial and non-commercial fuel storage and handling and waste management in the Stikine Country Protected Areas System.

Objectives and Strategies

To manage fuel handling and storage to avoid fuel spills and their impact on the environment.

- Develop fuel handling and storage guidelines for permitted commercial operators in Stikine Country Protected Areas in consultation with user groups. At a minimum, guidelines should include direction on:
    - acceptable fuel storage containers and dispensing methods;
    - location of the fuel storage site;
    - management of empty storage containers;
    - management of full or partially full storage containers at the end of the season; and,
    - a spill kit requirement.
- Require non-commercial outdoor recreation users who handle and store fuel during their recreation activities to follow fuel handling and storage guidelines.
- Require all commercial operators who handle and store fuel to have fuel spill kits.

To manage waste to avoid impacts on the environment.

- Apply waste management guidelines to all commercial base camps.
- Develop garbage disposal guidelines for non-commercial users.
- Review the waste management requirements for users of other rivers, such as the Tatshenshini River, and adapt those waste management requirements to the Stikine Country Protected Areas System if necessary.

9.3 Spiritual Values

One aspect of the vision statement is that the landscapes will "… support cultural, spiritual, recreational and economic activities…". Spiritual values are often mentioned in management plans but rarely described or addressed with management objectives and strategies. Since defining spiritual values is difficult, within the context of wilderness conservation and recreation in Stikine Country Protected Areas, spiritual values may be considered the connection or appreciation that one feels to his/her surroundings that cannot be described in physical, intellectual or emotional terms. For First Nations, spiritual values are intimately linked with their relationship with the land. The Tahltan Nation advises that Tahltan spiritual relationship is expressed in their oral stories, which describe how people were transformed into land formations, the origin of animals and plants, or where and what Tseskeyia Cho (Crow Big) created 'things we know today'.

Although spiritual values are difficult to define, protected area management planning still needs to at least attempt to address the spiritual connection that people feel towards the land and environment.

9.3.1 General Management Direction

Overall Direction

Spiritual values are recognized as key elements of the Stikine Country Protected Areas System and of the protected area visitor's experience.

Objectives and Strategies

To incorporate spiritual values into management in Stikine Country Protected Areas.

- Through consultation with First Nations, develop a summary of spiritual values for the Stikine Country and the British Columbia protected areas system.
- Work with First Nations to understand and define (if appropriate) their perspective about spiritual values in the Stikine Country Protected Areas System.
- Encourage management and activities that are respectful of spiritual values.
- Develop a management strategy to conserve spiritual values in the Stikine Country Protected Areas System.

10 Zoning and Managing Recreation Use in Specific Areas

10.1 Zoning

An integral part of the Stikine Country Protected Areas Management Plan is the application of the Environmental Stewardship Division's protected areas zoning framework to all protected areas except ecological reserves. Management plan zoning assists the planning and management of provincial parks, recreation areas and *ELU Act* protected areas. The zones reflect the intended land use, degree of human use, and the level of desired management and development. The following sections provide detailed descriptions of each zone found in Appendix 13. In addition, a summary of legislation and policies for ecological reserves is also provided. The management plan zones provide the framework for which activities are allowed within management areas (see below), with special considerations for local conditions.

Four zones are applied in the Stikine Country Protected Areas System:
- Wilderness Recreation;
- Natural Environment;
- Special Feature; and,
- Intensive Recreation.

The majority of the Stikine Country Protected Areas System is zoned Wilderness Recreation (Map 5).

10.1.1 Wilderness Recreation Zone

Zone Objective: To protect a remote, undisturbed natural landscape and to provide backcountry recreation opportunities dependent on a pristine environment where air access may be permitted to designated sites.

Zone Description: Covers about 1,345,100 hectares or 95.4% of the protected areas in the Stikine Country Protected Areas System. This zone includes all of Tatlatui Provincial Park and most of Pitman River Protected Area, Chukachida Protected Area, Mount Edziza Provincial Park, Spatsizi Plateau Wilderness Provincial Park and Stikine River Provincial Park.

Zone Management Guidelines: Oriented to protecting a pristine environment. Management actions are minimal and not evident. Managed to ensure low visitor use levels. Visitor access may be restricted to protect the natural environment and visitor experience.

Zone Facilities and Access: Facility development is minimal and is intended for user convenience and safety, and protection of the environment (e.g. trails, primitive campsites, etc.). Some basic facilities may be developed at access points (e.g. dock, primitive shelter, etc.). Access is non-mechanized access, except for low frequency air access that may be permitted to designated sites, and motorboat access in accordance with the management plan. Horse access may be permitted subject to prior approval. Foot, canoe, and raft access is permitted.

Zoning Rationale: By placing most of the protected areas in the Stikine Country Protected Areas System within a Wilderness Recreation Zone, Environmental Stewardship Division intends to protect the system's conservation values while providing an appropriate level of backcountry outdoor recreation. The protected areas are remote and relatively undisturbed, offering high quality wilderness opportunities. Most of these protected areas receive light visitor use.

People travel to these parks and protected areas to explore their backcountry. To protect the wilderness character of this zone, Environmental Stewardship Division will exercise control on methods of transportation and the location of landing sites. In general, Environmental Stewardship Division will closely manage visitor use as necessary to protect the natural, cultural heritage and outdoor recreation values of the Wilderness Recreation Zone.

10.1.2 Natural Environment Zone

Objective: To protect scenic values and to provide for backcountry recreation opportunities in a largely undisturbed natural environment.

Description: Contains about 2000 hectares or 0.1 % of the planning area and applies to all major facility developments, such as main camps with multiple structures, and includes facilities at Cold Fish Lake, Bug Lake, Laslui Lake, Tatlatui Lake, Kitchener Lake, Stalk Lake, Firesteel River (two sites), Buckley Lake, and the Stikine River (guide-outfitter camp just downstream from the mouth of the Spatsizi River). The Natural Environment Zone covers the water portion of the Stikine River upstream from the Intensive Recreation Zone to the mouth of the Chukachida River, the water portion of the Spatsizi River downstream from Hyland Post, and the water portions of the mainstems of the Pitman and Chukachida rivers (the associated foreshore areas are zoned Wilderness Recreation). The Natural Environment Zone will also apply to mining access roads through Pitman River Protected Area, Chukachida Protected Area and the proposed Mount Edziza Protected Area if those roads are developed.

Management Guidelines: Oriented to maintaining a natural environment and a high quality recreation experience. Visitor access may be restricted to preserve the recreation experience or to limit impacts. Incompatible outdoor recreation activities and transportation modes may be separated. Designation of transportation may be necessary to avoid potential conflicts (e.g. horse trails, cycle paths, hiking trails).

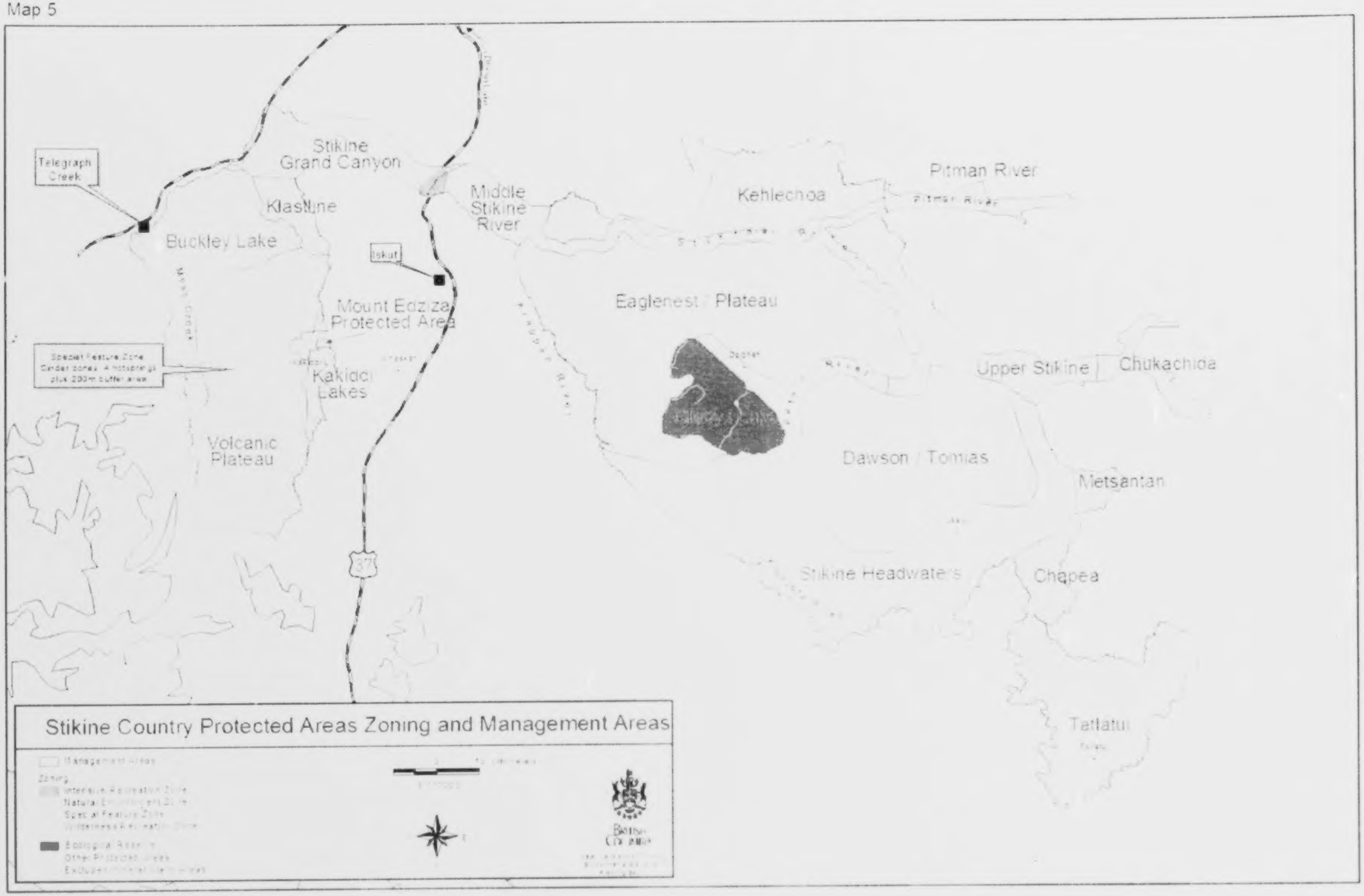
Zone Facilities and Access: Facilities are moderately developed for user convenience. Trails, walk-in/boat-in campsites, shelters, accommodation buildings may be permitted; facilities for motorized access (e.g. docks, landing strips, fuel storage, etc.) may also be permitted. Access may be motorized (powerboats, snowmobiles) or non-motorized (foot, horse, canoe, bicycles). Aircraft and motorboat access to drop-off and pickup points will be permitted.

Zoning Rationale: Under the guidelines for Natural Environment Zone, facilities such as those at Cold Fish Lake, Bug Lake Laslui Lake, Tatlatui Lake, Kitchener Lake, Stalk Lake, Firesteel River (two sites), Buckley Lake and the Stikine River (guide-outfitter camp just downstream from the mouth of the Spatsizi River) are in this zone. The intent for these facilities is to ensure their compatibility with the surrounding natural environment.

Map 5. Stikine Country Protected Areas Zoning and Management Areas.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/approved/map05_zoning.pdf

Map 5


Telegraph Creek
Stikine Grand Canyon
Klastline
Buckley Lake
Mess Creek
Special Feature Zone
Cinder cones, 4 hotsprings
plus 200m buffer area
Iskut
Mount Edziza Protected Area
Kakiddi Lakes
Volcanic Plateau
37
Middle Stikine River
Kehlechoa
Pitman River
Pitman River
Eaglenest / Plateau
Upper Stikine
Chukachida
Dawson / Tomias
Metsantan
Stikine Headwaters
Chapea
Tatlatui
Management Areas
Zoning
Intensive Recreation Zone
Natural Environment Zone
Special Feature Zone
Wilderness Recreation Zone
Ecological Reserve
Other Protected Areas
Excluded Mineral Claim Areas
British Columbia

Stikine Country Protected Areas Zoning and Management Areas

The Natural Environment Zone applies to the water portion of most of the Stikine River, a portion of the Spatsizi River, and all of the Chukachida and Pitman rivers. This zone acknowledges the use of these rivers for motorboat use.

10.1.3 Special Feature Zone

Objective: To protect and present significant natural or cultural resources, features or processes because of their special character, fragility and heritage values.

Description: Applies to four areas in the Stikine Country Protected Areas System:
- Mount Edziza cinder cones and the nearby pumice fields;
- Mess Creek hot springs and tufa deposits and other hot spring sites in Mount Edziza Provincial Park;
- Grand Canyon of the Stikine River; and,
- the Metsantan Area, which includes the Metsantan and Caribou Hide village sites.

In these four areas combined, the Special Feature Zone covers approximately 12,000 hectares or 0.9% of the Stikine Country Protected Areas System.

Management Guidelines: High level of management protection with ongoing monitoring. Oriented to maintaining resources and, where appropriate, a high quality recreational and interpretative experience. The Special Feature Zone advocates active or passive management depending on size, location, and nature of the resource. Visitor access may be restricted to preserve the recreation experience and to limit impacts.

Zone Facilities and Access: Only interpretative facilities are permitted since the intent of the zone is to protect resources. Various types of access may be permitted. Special access permits may be required.

Zoning Rationale: The Special Feature Zone contains the Mount Edziza cinder cones and the nearby pumice fields because of the delicate and vulnerable character of these landforms. The cones are comprised of unstable volcanic material often covered with a lichen crust that is easily disturbed. The pumice fields issued from the cones are easily damaged by visitor foot traffic. Special management precautions may be needed to protect these cones and pumice fields to prevent further disturbance of the type that has occurred on Eve Cone.

The Special Feature Zone is appropriate for the Mess Creek hot springs and tufa deposits, and other hot spring areas to protect the calcite deposits from potential visitor damage. These deposits are provincially significant. This zoning designation is consistent with the direction given in the Cassiar Iskut-Stikine LRMP.

The Special Feature Zone applies to the Grand Canyon of the Stikine River in recognition of its status as an internationally significant landform feature, its spectacular volcanic character and spiritual significance to the Tahltan Nation. This canyon is home to mountain goats that are vulnerable to aerial disturbance from aircraft, particularly low-flying helicopter flights. Special aircraft management procedures are needed to minimize this disturbance.

The Special Feature Zone also covers the Metsantan area, which includes the Metsantan and Caribou Hide village sites in recognition of the extremely high cultural significance of these sites to the Tahltan Nation. The village sites contain gravesites, remnant buildings and archaeological sites. Special access management protocols will be needed to protect these sites.

10.1.4 Intensive Recreation Zone

Objective: To provide for a variety of readily accessible, facility-oriented outdoor recreation opportunities.

Description: Covers about 2900 hectares or 0.2% of the planning area and applies to the area around the Stikine River Bridge in Stikine River Provincial Park.

Management Guidelines: Oriented toward maintaining a high quality recreation experience. Guidelines call for intensive management of resource and/or control of visitor activities. Operational facilities designed for efficient operation while remaining unobtrusive to the park visitor.

Zone Facilities and Access: This zone may be intensely developed for user convenience with campgrounds, landscaped picnic/play areas, trail accommodation or interpretative buildings, boat launches, administrative buildings, service compounds, gravel pits, disposal sites, wood lots; parking lots, etc. All-weather public roads or other types of access may be permitted where use levels are high.

Zoning Rationale: The Intensive Recreation Zone applies to the area around the Stikine River Bridge in Stikine River Provincial Park. Here public outdoor recreation use concentrates largely because of the strategic location of this site as the take-out point for rafting and canoeing trips on the Stikine River. A toilet and a crude boat launch support these uses and some camping also occurs although no designated campground exists. This zoning designation also "*allows opportunities for frontcountry tourism development in the vicinity of the Stikine bridge on Highway 37*" as directed by Cassiar Iskut-Stikine LRMP.

10.1.5 Ecological Reserves

The intent of ecological reserves is to preserve representative and special natural ecosystems, plant and animal species, features and phenomena. The Gladys Lake Ecological Reserve, which is surrounded by Spatsizi Plateau Wilderness Provincial Park, covers 44 098 hectares and represents 3.4% of the Stikine Country Protected Areas System. Ecological reserves prohibit all consumptive uses, with scientific research and education the main activities. The Environmental Stewardship Division management zoning framework does not apply to ecological reserves.

10.2 Management Areas

This management plan divides the protected areas into management areas to allow for more specific management in portions of the protected areas that have the same zoning designation (Map 5). The large size of the Wilderness Recreation Zone, in particular, necessitated the definition of management areas. Both ecosystem (e.g. wildlife) and recreation use patterns information helped define the boundaries of the management areas.

The zone designations provide the framework for the kind of activities allowed within the management areas, with special considerations for local conditions. This section provides details about the specific outdoor recreation and conservation (natural and cultural heritage values) management objectives, considerations and actions for each management area. Sections 8 and 9 contain general direction that applies to all areas. Table 5, at the end of this section, provides a summary of key natural, cultural and outdoor recreation values and management direction.

The Volcanic Plateau, Buckley Lake, Klastline, Kakiddi Lakes, Mount Edziza Protected Area and Stikine Grand Canyon management areas are located within the Mount Edziza Greater Ecosystem. All other management areas are located within the Spatsizi Greater Ecosystem except the Middle Stikine River Management Area, which lies in both Greater Ecosystems.

10.2.1 Volcanic Plateau Management Area

The Volcanic Plateau Management Area covers most of Mount Edziza Provincial Park including the Mount Edziza massif, the Spectrum Range, and the upper reaches of Mess Creek and Mess Lake. This management area contains significant volcanic landscapes including Mount Edziza and its associated cinder cones and the colourful Spectrum Range, as well as calcite deposits, hot springs and culturally important obsidian deposits. Pipe Organ Mountain, a volcanic feature of radiating columnar basalts, also occurs in this management area along the boundary with the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area). Most of the Stone's sheep and mountain goat habitat and a substantial portion of the caribou summer range occur within this management area. Plants and plant communities at risk associated with volcanic features and hot springs exist in this management area.

The Volcanic Plateau Management Area is primarily used by hikers and hunters, with most hikers travelling between Buckley and Mowdade lakes with some travelling through the Spectrum Range. Mountaineers occasionally climb Mount Edziza. These users access or egress the park mostly by floatplane from Buckley, Mowdade, Little Ball, Ball, and Arctic (outside the park) lakes. Horses are used by both hunters and other backcountry recreation users who primarily gain access to the management area via the Klastline and Mount Edziza trails. The southern areas of the Volcanic Plateau Area see limited horse use. Outdoor recreation use of this management area is generally extremely low and will continue to be lower than in the Buckley Lake and Kakiddi Lakes management areas.

Few facilities or signs of human presence exist within this management area; the exceptions include the historic Dominion Telegraph Trail, a trapper's camp on Mess Lake, a guide-outfitter camp on Mess Lake, and the central, mostly alpine parts of the Mount Edziza Trail. This is a well-established route and has markers such as cairns along portions of it. Most of the Volcanic Plateau Management Area is zoned Wilderness Recreation except for the cinder cones, pumice fields and Mess Creek hot springs/calcite deposits and other hot springs, which are zoned Special Feature in recognition of the fragile volcanic deposits, and the vulnerability of the calcite deposits and associated plants communities.

The Cassiar Iskut-Stikine LRMP provides the following direction for the Mess Creek hot springs area (Cassiar Iskut-Stikine LRMP 2000):

- "*Provide designated trails to minimize damage to calcite deposits*".

Management Objectives

- *To protect the plant communities and physical features of the cinder cones and calcite deposits in Mount Edziza Provincial Park.*
- *To prevent damage to the calcite deposits at Mess Creek hot springs and the other hot spring sites.*
- *To maintain Stone's sheep, mountain goat and caribou and their habitat.*
- *To maintain a high quality wilderness environment with few signs of human presence and a focus on self-supported outdoor recreation activities.*
- *To maintain low levels of use with no day trips or limited helicopter activity.*

Key Considerations and Strategies

- New trails and structures will not be considered in this management area.
- Provide for the maintenance of the Mount Edziza Trail to BC Parks and Protected Areas Class IV standards.
- Limit floatplane access to Little Ball Lake and Little Arctic Lake to drop-off and pick-up for multi-day trips only (i.e. no day-use activities). The number of takeoffs and landings may need to be controlled in the future.
- Maintain the prohibition on wheeled aircraft landings.
- Allow helicopter landings only for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Maintain the ban on helicopter landings on cinder cones and implement a ban on helicopter landings on calcite deposits, associated plant communities and other associated features at hot springs.
- Develop and provide information to protected area visitors about the cultural importance of the obsidian deposits to the Tahltan Nation to help protect these sensitive cultural heritage features.
- Monitor the effects of hiking use on the cinder cones and restrict access to designated trails or prohibit access, if necessary, to protect natural values.
- Provide information to protected area visitors about the fragility of lichen crust communities.
- Protect Eve Cone by marking and restricting access to the established route up the cinder cone.
- Protect all hot springs and associated plants and plant communities at risk by providing information about the sensitivity of the calcite deposits, and by building designated trails where necessary.
- Assess the Mess Creek hot springs and other hot springs for location and extent of plants and plant communities at risk and sensitive plants and plant communities.
- Work with the Tahltan Band Council, the Iskut First Nation, the Ministry of Energy and Mines and the mining industry to protect Pipe Organ Mountain.
- Monitor outdoor recreation use levels and develop strategies if outdoor recreation use results in unacceptable impacts on Stone's sheep, caribou, mountain goat and damage to plants and plant communities at risk.

10.2.2 Buckley Lake Management Area

The Buckley Lake Management Area covers the northern portion of Mount Edziza Provincial Park between the alpine areas of the Mount Edziza massif and the Stikine River, and includes the northern part of the Mess Creek addition. The management area contains important caribou winter range, mule deer habitat, canyon features along Stikine River and Mess Creek including dry steppe slopes, and the Tahltan Eagle, a culturally significant volcanic feature to the Tahltan people. This management area also includes the Telegraph Creek/Klastline Trail and the northern section of the Mount Edziza Trail.

Hikers, horse travellers, hunters and guide-outfitters travelling on the Mount Edziza and Telegraph Creek/Klastline trails are the main recreation users in this management area. Some angling on Buckley Lake also occurs. Outdoor recreation use of this management area is expected to be higher than in the Volcanic Plateau Management Area.

The Buckley Lake Management Area is zoned Wilderness Recreation. The management area contains most of the facilities in Mount Edziza Provincial Park, although few facilities exist. A rustic campsite and a guide-outfitter camp with tent-frames and corrals are located at Buckley Lake, and two trapper cabins are located at Mess Creek. Other facilities include an old village site near Telegraph Creek and some old cabins in the area around Buckley Lake.

Management Objectives

- *To protect sensitive canyon features, cultural features, and caribou winter range.*
- *To maintain a high quality wilderness experience with little sign of human presence and few facilities to support backcountry use.*

Key Considerations and Strategies

- Consider new facilities (trails, routes and structures) or additions to existing camps in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be considered in the form of small, rustic backcountry shelters, such as tent frames and small cabins. For the portion of the Buckley Lake Management Area east of Mess Creek, new structures will be considered only in the form of non-permanent shelters. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities.
- Provide for the maintenance of the Mount Edziza and Telegraph Creek/Klastline trails to BC Parks Class IV standards.
- Manage floatplane drop-off and pick-up access on Buckley Lake for multi-day trips and limited day-use activity. Monitor the number of takeoffs and landings to determine if use warrants further management controls and limits on flight numbers.
- Allow motorboat use to continue on Buckley Lake, consistent with historic levels of use. Review and revise the status of motorboat use of Buckley Lake if necessary.
- Investigate the current population structure of trout in Buckley Lake and monitor angling pressure. Further stocking of Buckley Lake will not be allowed.
- Conduct a study using radio-collars for caribou in Mount Edziza Provincial Park to determine winter habitat use and important wintering areas.

- Monitor outdoor recreation use levels and develop strategies if outdoor recreation use results in unacceptable impacts on caribou, caribou habitat and dry steppe plant communities.
- Work with the Tahltan Band Council, the Iskut First Nation and the Ministry of Transportation to assess a possible pullout for viewing the Tahltan Eagle.
- Work with the Tahltan Band Council and the Iskut First Nation to develop an interpretive package for the Tahltan Eagle.
- Map dry steppe plants and plant communities at risk along the Stikine River, Klastline River and Mess Creek and develop management actions to protect these plants from human disturbance.

10.2.3 Klastline Management Area

The Klastline Management Area covers the Klastline River area added to Mount Edziza Provincial Park resulting from the Cassiar Iskut-Stikine LRMP process. The management area contains important mule deer habitat as well as caribou winter range and canyon features along the Klastline River. Outdoor recreation use of this management area is low and is primarily related to hunting and travel along the Klastline Trail. The Klastline Management Area is zoned Wilderness Recreation Zone.

The Cassiar Iskut-Stikine LRMP provided the following direction for the Klastline Management Area (Cassiar Iskut-Stikine LRMP 2000):

- "S*nowmobile use is allowed along the Klastline Trail*";
- "*Maintain opportunities for construction of cabins, as required, to support recreational use along the Klastline Trail*"; and,
- "*Permit non-motorized use only on Klastline Trail from spring thaw to fall freeze-up*".

Management Objectives

- *To minimize impacts of outdoor recreation activities on high value mule deer winter range.*
- *To maintain a high quality wilderness experience with little sign of human presence.*
- *To provide access over the Klastline River.*

Key Considerations and Strategies

- Follow the Cassiar Iskut-Stikine LRMP direction regarding snowmobile use, motorized use and cabin construction.
- Consider new facilities (trails, routes and structures) in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins.
- Provide for the maintenance of existing trails and routes, including the Telegraph/Klastline Trail, to BC Parks Class IV standards.
- Work with the Tahltan Band Council and the Iskut First Nation to develop snowmobile use guidelines along the Klastline Trail in the Klastline Management Area.

- Review bridge placement options over the Klastline River with the Tahltan Band Council and the Iskut First Nation, and construct a bridge if funding is available.
- Map mule deer winter range so that impacts can be minimized.

10.2.4 Kakiddi Lakes Management Area

The Kakiddi Lakes Management Area contains the regionally significant chain of lakes on the east side of Mount Edziza Provincial Park including Nuttlude, Kakiddi, Mowchilla and Mowdade lakes, the immediate area around those lakes, and the southern portion of the Mount Edziza Trail. The Kakiddi Lakes chain is important in conserving a rainbow trout only fish system. This chain of lakes has recently started receiving limited attention from canoeists. Recreation use is relatively low and largely from visitors who use Mowdade Lake as an access or egress point for the Mount Edziza Trail. Some hunting occurs around the lakes and some canoeing occurs on the lake chain. The Kakiddi Lakes Management Area is zoned Wilderness Recreation.

Access to this management area could potentially become easier if the mineral claims in the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) are developed. The only existing facilities in this management area are the campsite on Mowdade Lake and the Mount Edziza Trail. The proposed Mount Edziza Protected Area is not part of the Kakiddi Lakes Management Area.

Management Objectives

- *To maintain the natural rainbow trout only fish system in the Kakiddi Lakes chain.*
- *To provide wilderness canoeing opportunities on the Kakiddi Lakes chain.*
- *To minimize and mitigate impacts on the viewscape from Kakiddi Lake to support wilderness recreation, while respecting management regimes outside the park.*
- *To minimize and mitigate impacts on natural, cultural heritage and outdoor recreation values, while respecting management regimes outside the park, if mining activities occur within and a road is developed to the Mount Edziza Resource Management Zone.*

Key Considerations and Strategies

- Consider new facilities (trails, routes and structures) in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins.
- Allow floatplane drop-off and pick-up access on Mowdade, Nuttlude and Kakiddi lakes for multi-day trips and limited day-use activity. Monitor the number of takeoffs and landings to determine if use warrants further management controls and limits on the number of flight.
- Work with other agencies and the Tahltan Band Council and Iskut First Nation in managing any development in the management area, including roads, forestry and tourism, that could affect park values.
- Evaluate the potential of the Kakiddi Lakes chain as a canoe route and consider establishing Mowchilla Lake as a non-motorized lake only.
- Conduct impact monitoring along the lake chain at the initial stages of visitor canoe use of this route.

- Monitor water quality in the Kakiddi Lakes chain prior to and after development of a mining road if such a road is required to the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area).
- Work with the Ministry of Energy and Mines and the mining industry to minimize and mitigate impacts on water quality, quantity and flow in the Kakiddi Lakes Management Area if a mining road is developed or other mining activities occur on adjacent lands.
- Monitor angling pressure on the Kakiddi Lakes chain prior to and after mine road development if such access is required. Revise angling regulations if necessary.

10.2.5 Mount Edziza Protected Area Management Area

The Mount Edziza Protected Area Management Area includes all 607 hectares of the proposed Mount Edziza Protected Area. The Cassiar Iskut-Stikine LRMP recommended this protected area to facilitate access to the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area). Outdoor recreation use of this management area is currently low, with some hunting activity based out of the Kakiddi Lakes chain, but will increase if the mine road proceeds.

The Mount Edziza Protected Area Management Area will be zoned Wilderness Recreation when the protected area is established. If a mining road is developed, however, the road portion of the management area will be zoned Natural Environment Zone while the rest of the management area will remain Wilderness Recreation. Once the road alignment is finalized, the balance of the proposed Mount Edziza Protected Area will be upgraded to Class A provincial park and amalgamated into the Mount Edziza Provincial Park as part of the Kakiddi Lakes Management Area.

Management Objectives

- *To maintain the natural rainbow trout only fish system in the Kakiddi Lakes chain.*
- *To maintain the wilderness setting with few permanent facilities.*
- *To minimize and mitigate impacts on natural and cultural heritage values in the proposed Mount Edziza Protected Area and in Mount Edziza Provincial Park if a road is developed through the proposed Mount Edziza Protected Area.*

Key Considerations and Strategies

- The Cassiar Iskut-Stikine LRMP provided guidelines, including the possibility that, following a full review, a road may be built through the proposed Mount Edziza Protected Area to provide access to mineral claims in the proposed Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area), if required.
- Consider new facilities (trails, routes and structures) in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins.
- Evaluate the need to develop a portage trail to supply canoe access to Nuttlude Lake if a road is constructed through this management area.
- Work with First Nations, other management agencies and mining companies to manage access to the proposed Mount Edziza Protected Area, if a mining road is constructed.

- Work with the Ministry of Energy and Mines and with the mining industry to minimize and mitigate impacts on water quality, quantity and flow within the proposed Mount Edziza Protected Area if a mining road is developed in or adjacent to the proposed Mount Edziza Protected Area or if other mining activities occur adjacent to Mount Edziza Provincial Park and the proposed Mount Edziza Protected Area.
- Follow the Cassiar Iskut-Stikine LRMP guidelines for road access to the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area), if road development is required through the proposed Mount Edziza Protected Area.
- Work with the mining company and other land management agencies to minimize and mitigate impacts to Mount Edziza Provincial Park and proposed Mount Edziza Protected Area from access, mining exploration and mining activities.
- Install a gate on any road to the proposed Mount Edziza Protected Area, and deactivate the road when use associated with mining ends.

10.2.6 Stikine Grand Canyon Management Area

The Stikine Grand Canyon Management Area includes the area of Stikine River Provincial Park downstream of the boat launch at Highway 37 and most of the Grand Canyon of the Stikine River. This management area is home to a mountain goat population that lives on the steep canyon walls and to several dry steppe plant communities at risk. Aircraft flights below the rim of the canyon are banned from May 15 – July 15 to protect mountain goats on their natal areas. Boating through this area is extremely dangerous and not recommended. Recreation use in the Stikine Grand Canyon Management Area focuses mainly on viewing the canyon and the mountain goats that inhabit it. Some sightseeing flights over the canyon and some hunting activity occur within the Stikine Grand Canyon Management Area.

The Tahltan Nation considers the Grand Canyon of the Stikine River a sacred site.

The Grand Canyon of the Stikine River is zoned Special Feature and the remainder of the Stikine Grand Canyon Management Area is zoned Wilderness Recreation. The Grand Canyon of the Stikine River is currently relatively inaccessible, and the Cassiar Iskut-Stikine LRMP has provided the following direction (Cassiar Iskut-Stikine LRMP 2000):

- "*Allow a range of frontcountry to backcountry viewing opportunities along the Grand Canyon of the Stikine*".

Management Objectives

- *To protect the mountain goat population and dry steppe ecosystems along the Stikine River.*
- *To provide viewing opportunities of the Grand Canyon of the Stikine River.*
- *To recognize Tahltan Nation spiritual values in managing the area.*

Key Considerations and Strategies

- Closely monitor sightseeing aircraft flights to determine their effects on the mountain goat population.
- Maintain current avoidance specifications for mountain goats in the Grand Canyon of the Stikine River:

  - ➢ Flying over the Stikine Canyon (Latham Creek to Telegraph Creek) is permitted at an altitude of greater than 1050 meters (3500 feet) above sea level.
  - ➢ Flying within the Stikine Canyon is permitted only from site Z (UTM 255422) to UTM 140447, and must be low in the canyon, and only when wind, visibility, and pilot skill permits. No hovering or circling is permitted to take place.
  - ➢ All efforts are to be made to avoid disturbing mountain goats occupying the area of site Z (UTM 255422).
  - ➢ Flying within the Stikine Canyon is prohibited during the kidding season May 15 to July 15.
- Monitor the effects of aircraft on the mountain goats for possible impacts and develop and implement additional management strategies if necessary.
- Allow helicopter landings only for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Consider new facilities (trails, routes and structures) in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins.
- New facilities (trails, routes and structures) will not be considered in the Special Feature Zone other than those associated with approved backcountry viewing opportunities.
- Initially, develop one trail or route to the Grand Canyon of the Stikine River subject to conducting an impact assessment following BC Parks Impact Assessment Process to avoid unacceptable impacts on mountain goat populations or on plants or plant communities at risk, from viewing activities or trails.
- Provide a pullout on the Telegraph Creek Road for access to the proposed initial trail to the Grand Canyon of the Stikine River. Provide additional pullouts for additional trails as required.
- Work with the Tahltan Nation to ensure that public viewing areas or trails are located, designed and signed in recognition of First Nations spiritual values.
- Establish up to 2 commercial recreational guiding opportunities (excluding hunting) in the Stikine Grand Canyon Management Area. Preference for guided recreational opportunities will be given to qualified guides from the Tahltan Nation.
- Consider restrictions on hunting of mountain goats in viewing areas of the Grand Canyon of the Stikine River in consultation with affected user groups.
- Accommodate existing commercial uses that are consistent with protected area values, as recommended in the Cassiar Iskut-Stikine LRMP.
- Implement the Cassiar Iskut-Stikine LRMP direction to "*Identify existing private commercial uses that may be untenured and seek to accommodate those uses consistent with protected areas values and the protected area management plan e.g. the existing trail riding operation*".
- Map plants and dry steppe communities at risk along the Stikine River and protect them from human disturbance.
- Boating through the Grand Canyon of the Stikine River is not recommended. Boating through the canyon will be by permit only and must be undertaken at the boater's own risk.

10.2.7 Middle Stikine River Management Area

The Middle Stikine River Management Area contains the boat launch at Highway 37, Stikine River Provincial Park between the Highway 37 crossing and Beggerlay Creek, and a corridor area 0.5 kilometres on either side of the river upstream of Beggerlay Creek to the Spatsizi River, and along the Pitman River to Pitman River Protected Area. This management area contains important caribou winter range, and a significant portion of the only fully protected area in British Columbia enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories.

The middle section of the Stikine River is commonly used by floatcraft and motorboats. Facilities include: a guide-outfitter camp near the confluence of the Stikine and Spatsizi rivers; a trapper's cabin beside the McBride River; an Environmental Stewardship Division cabin on the Stikine River near the Spatsizi River; the BCR railroad bridge over the Stikine River; and a foot bridge over Beggerlay Creek. Any future facility development within Stikine River Provincial Park will be focussed in this management area.

The Cassiar Iskut-Stikine LRMP provided the following direction (Cassiar Iskut-Stikine LRMP 2000):

- "*Allow opportunities for construction of backcountry cabins as required to support recreational use, compatible with protected area values*";
- "*Continue to allow motorized boat use for recreation and hunting along the Stikine, Chukachida, and Pitman Rivers, consistent with acceptable types and levels of use*"; and,
- "*Allow opportunities for frontcountry tourism development in the vicinity of the Stikine bridge on Highway 37*".

Three management plan zones apply to the Middle Stikine River Management Area. The area around the Highway 37 Bridge is zoned Intensive Recreation in recognition of the area's higher use and to allow possible frontcountry tourism development at this strategic location. The Natural Environment Zone covers the water portion of the Stikine River upstream from the Intensive Recreation Zone, and the water portion of the mainstem of the Pitman River (the associated foreshore areas are zoned Wilderness Recreation) to acknowledge the multi-day motorboat trips. The guide-outfitter camp near the confluence of the Stikine and Spatsizi rivers is also zoned Natural Environment. The rest of the Middle Stikine River Management Area is zoned Wilderness Recreation

Rafters, canoeists, hunters and motorboat users travelling on the Stikine River are the main outdoor recreation users of this area. Motorboats, floatplanes and horses are often used to access hunting areas. Other users include guide-outfitters and their clients, and some hikers.

Management Objectives

- *To protect bull trout populations and caribou winter range.*
- *To provide non-motorized user groups with wilderness opportunities with few interactions with motorized users.*
- *To provide for motorboat use as a means of transportation.*
- *To maintain a wilderness setting with few facilities.*

- *To facilitate non-motorized winter outdoor recreation activities.*
- *To provide limited frontcountry development near the Highway 37 Bridge.*

Key Considerations and Strategies

- Consider new facilities (trails, routes and structures) and additions to existing camps in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities.
- Work with Ministry of Transportation to maintain access to the Stikine River at the Highway 37 Bridge.
- Consider road access to potential frontcountry type development at the Highway 37 Bridge while avoiding unacceptable impacts to park values.
- Investigate developing a trail for half to full day frontcountry hiking trips and/or an interpretive trail in the Stikine River Bridge area.
- Allow motorboat use to continue on the Stikine and Pitman rivers, consistent with historic types and levels of use.
- Encourage non-motorized boat users to travel at times when the chance of encountering motorboats will be minimal and provide them with information about motorized use.
- Encourage all river users to practice no-trace camping techniques.
- Provide information on river etiquette to motorized and non-motorized river users to address safety concerns and to minimize potential negative interactions.
- Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized users.
- Monitor river user experiences and site impacts and establish controls on river use, if needed, to maintain visitor satisfaction. Possible controls include number of groups, group size, trip timing and number of trips/day.
- Consider commercial motorboat use on the Stikine River system above the Highway 37 Bridge for drop-off and pick-up purposes involving multi-day trips, and guide-outfitter support only. Provide a limited number of trips by a maximum of 2 commercial operators.
- Consider commercial non-motorized winter recreation opportunities where they do not pose unacceptable impacts on caribou and their winter range.
- Assess the extent and impacts of unauthorized camps (e.g. along the Stikine River downstream from the mouth of the Spatsizi River) and develop site plans as needed. If necessary, remove some sites and designate formal camping areas.
- Monitor water quality in the Stikine River and affected tributaries prior to and after proposed forest harvesting development north of the park.
- Work with the Ministry of Forests to minimize and mitigate impacts on water quality, quantity and flow, and other protected area values by forest harvesting practices and associated road building.
- Work with BC Rail to determine the safety conditions at the BCR railroad bridge and to implement any required measures.

10.2.8 Kehlechoa Management Area

The Kehlechoa Management Area covers the area within Stikine River Provincial Park north of the Stikine River corridor between Beggerlay Creek and Pitman River Protected Area. This management area consists mostly of lower elevation forests in the northern portion with some alpine areas in the western portion. The low elevation forests contain high value caribou and moose winter habitat; high elevation alpine areas contain important Stone's sheep and mountain goat habitat. Outdoor recreation use in the management area is low and there are no known facilities in this management area. The management area is mostly used by hunters, and guide-outfitters and their clients; guide-outfitters often use horses to access hunting areas.

The Kehlechoa Management Area is zoned Wilderness Recreation with a focus on maintaining caribou and caribou winter habitat values. New structures will generally not be considered in this management area unless necessary to support existing tenures. Instead, potential new structures will be directed to the river corridor in the Middle Stikine River Management Area.

Management Objectives

- *To protect wildlife and high value wildlife habitat, especially caribou winter range.*
- *To provide generally non-facility based backcountry recreation.*

Key Considerations and Strategies

- New structures will not be considered in this management area unless they are necessary to support existing tenures. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities.
- New trails and routes may be established only after conducting an impact assessment following the BC Parks Impact Assessment Process.
- Consider commercial non-motorized recreation that uses existing facilities within this and adjacent areas.
- Work with other agencies and First Nations to minimize and mitigate impacts of potential industrial activity and access in the area adjacent to the north, in the McBride River area, and in the area east of Tucho River, on protected area values, especially caribou and caribou winter range.
- Focus on maintaining caribou and caribou winter habitat, and Stone's sheep and mountain goat populations and habitat.

10.2.9 Upper Stikine Management Area

The Upper Stikine Management Area covers the area north and east of the Middle Stikine River and Dawson/Tomias areas between the Pitman and Chukachida rivers. This management area contains mostly valley bottom and lower elevation forest, as well as the Stikine River upstream of the Spatsizi River to the Chukachida River, and the lower reaches of the Chukachida River. The management area includes significant low elevation caribou and moose winter habitat and bull trout habitat.

Outdoor recreation use of areas not adjacent to the Stikine River is low; most use in that part of the area is by hunters and guide-outfitters and their clients; guide-outfitters often use horses to access hunting areas. Both motorized and non-motorized boat traffic use the Stikine and Chukachida rivers.

Facilities include the guide-outfitter camp at Hyland Post (on private property) and a guide-outfitter cabin at the confluence of the Chukachida and Stikine rivers. In recognition of the high wildlife values in this management area and difficult access, new cabins or tent frames will not be considered in this management area; any potential new facilities will be directed to the river corridor in the Middle Stikine River Management Area.

Two management plan zones apply to the Upper Stikine Management Area. The Natural Environment Zone covers the water portions of the Stikine and Chukachida rivers and the water portion of the Spatsizi River downstream from Hyland Post (the associated foreshore areas are zoned Wilderness Recreation) to acknowledge the multi-day motorboat trips. The rest of the management area is zoned Wilderness Recreation and excludes the private property at Hyland Post.

Management Objectives

- *To protect high value wildlife habitat, especially low elevation moose and caribou winter habitat.*
- *To protect bull trout and bull trout habitat.*
- *To continue to provide non-facility based backcountry recreation.*
- *To provide non-motorized user groups with wilderness opportunities with few interactions with motorized users.*
- *To provide for motorboat use as a means of transportation.*

Key Considerations and Strategies

- New structures will not be considered in this management area.
- New trails and routes may be established only after conducting an impact assessment following the BC Parks Impact Assessment Process.
- Allow helicopter landings only for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Allow motorboat use to continue on the Stikine River, on the Spatsizi River downstream from Hyland Post, and on the Chukachida River, consistent with historic types and levels of use.
- Maintain the non-motorized use restriction on the Spatsizi River upstream of Hyland Post from breakup to September 1. One exception is provided to allow the guide-outfitter to access Bear Camp for maintenance purposes.
- Encourage non-motorized boat users to travel at times when the chance of meeting motorboat users is minimal and provide them with information on motorized boat use.
- Provide information on river etiquette to all motorized and non-motorized river users to address safety concerns and to minimize potential negative interactions.
- Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized uses.
- Monitor river user experiences and site impacts and establish controls on river use, if needed, to maintain visitor satisfaction. Possible controls include number of groups, group size, trip timing, and number of trips/day.

- Consider commercial motorboat use on the Stikine River system above the Highway 37 Bridge for drop-off and pick-up purposes for multi-day trips, and guide-outfitter support only. Provide a limited number of trips by a maximum of 2 commercial operators.
- Consider commercial non-motorized recreation that uses existing facilities within this and adjacent management areas.
- Assess areas of concentrated horse use (e.g. guide-outfitter camps) and develop strategies to minimize impacts of horse use where required.
- Work with other agencies and First Nations to minimize and mitigate impacts of potential industrial activity and access in the adjacent area to the east of the management area on protected area values, especially caribou and moose.
- Assess the extent and type of impacts of informal campsite use (e.g. along the Stikine River downstream from the mouth of the Spatsizi River) and develop site plans as needed. If necessary, remove some sites and designate formal camping areas.
- Work cooperatively with the private property owner of Hyland Post to encourage private management of the site that reflects the intent of the Stikine Country Protected Areas Management Plan.

10.2.10 Pitman River Management Area

The Pitman River Management Area includes the entire Pitman River Protected Area. The management area includes important moose winter habitat and bull trout habitat and a wildlife movement corridor linking Stikine Country Protected Areas with important wildlife habitat and protected areas to the east. Guide-outfitters and hunters are the primary outdoor recreation users of this management area; motorboats, floatplanes and horses are often used to access hunting areas. The only facility in this management area is the guide-outfitter camp on Pitman Lake.

The Cassiar Iskut-Stikine LRMP provided for possible road access across the Pitman River to allow access to potential mines in the adjacent area, if no alternative routes exist outside the protected area. The Cassiar Iskut-Stikine LRMP also provided the following direction for recreation management in the Pitman River Protected Area (Cassiar Iskut-Stikine LRMP 2000):

- "*Allow opportunities for construction of backcountry cabins as required to support recreational use, compatible with protected area values*"; and,
- "*Continue to allow motorized boat use for recreation and hunting along the Stikine, Chukachida, and Pitman Rivers, consistent with historic types and levels of use*".

The Pitman River Management Area is zoned Wilderness Recreation except for the water portion of the mainstem of the Pitman River, which is zoned Natural Environment (the associated foreshore areas are zoned Wilderness Recreation). If a mining road is developed, the road corridor will be zoned Natural Environment.

Management Objectives

- *To maintain moose and bull trout and their habitat.*
- *To maintain the integrity of the wildlife movement corridor along the Pitman River between the Stikine Country area and wildlife habitat to the east.*
- *To ensure that if road access is required through the area that it follows guidelines set out in the Cassiar Iskut-Stikine LRMP.*

- *To minimize and mitigate impacts on protected area natural, cultural heritage and recreation values if road access is developed and mining activities occur adjacent to the protected area.*
- *To maintain the wilderness setting with few facilities.*

Key Considerations and Strategies

- Consider new facilities (trails, routes and structures) or additions to existing camps in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities.
- Allow motorboat use to continue on the Pitman River and Pitman Lake, consistent with historic types and levels of use.
- Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized uses.
- Consider commercial motorboat use on the Stikine River system above the Highway 37 Bridge only for drop-off and pick-up purposes of multi-day trips, and guide-outfitter support. Provide a limited number of trips by a maximum of 2 commercial operators.
- Monitor water quality in the Pitman River prior to and after development if a bridge/road crossing is required.
- Work with the Ministry of Energy and Mines and with the mining industry to minimize and mitigate impacts on water quality, quantity and flow and other protected values within the protected area if bridge/road crossing is required over the Pitman River or if other mining activities occur adjacent to the protected area.
- Work with the Ministry of Energy and Mines and the mining industry to minimize and mitigate impacts on the Pitman River wildlife movement corridor.
- Conduct stream inventories for the Pitman River to identify important bull trout habitat and to collect basic aquatic information.
- Work with other agencies and First Nations to ensure that any potential bridge across the Pitman River avoids crossing the river near important bull trout habitat.
- Work with other agencies and First Nations on access management if road access is constructed across the Pitman River.
- Assess the extent and type of impacts of informal campsite use and develop site plans as needed. If necessary, remove some sites and designate formal camping areas.
- Monitor angling pressure on the Pitman River fish populations prior to and after development if bridge/road crossing is required and revise angling regulations if necessary.

10.2.11 Chukachida Management Area

The Chukachida Management Area includes all of Chukachida Protected Area. This management area contains important moose winter and summer habitat and bull trout habitat, and a wildlife movement corridor linking Stikine Country Protected Areas with important wildlife habitat and protected areas to the east. Guide-outfitters, angling guides and hunters are the primary outdoor recreation users of this management area; motorboats, floatplanes and horses are often used to access hunting areas. The only facilities in this area are two cabins, one trapline cabin and one guide-outfitter cabin, on Chukachida Lake.

The Cassiar Iskut-Stikine LRMP provided for possible road access across the Chukachida River to access potential mines in the adjacent area, if no alternative routes exist outside the protected area. The Cassiar Iskut-Stikine LRMP also provided the following direction for recreation management in Chukachida Protected Area (Cassiar Iskut-Stikine LRMP 2000):

- "*Allow opportunities for construction of backcountry cabins as required to support recreational use, compatible with protected area values*"; and,
- "*Continue to allow motorized boat use for recreation and hunting along the Stikine, Chukachida, and Pitman Rivers, consistent with acceptable types and levels of use*".

The Chukachida Management Area is zoned Wilderness Recreation except for the water portion of the mainstem of the Chukachida River, which is zoned Natural Environment (the associated foreshore areas are zoned Wilderness Recreation). If a mining road is developed, the road corridor will be zoned Natural Environment.

Management Objectives

- *To maintain moose and bull trout and their habitat.*
- *To maintain the integrity of the wildlife movement corridor along the Chukachida River between the Stikine Country area and wildlife habitat to the east.*
- *To ensure that if road access is required through the area that it follows guidelines set out in the Cassiar Iskut-Stikine LRMP.*
- *To minimize and mitigate impacts on protected area natural, cultural heritage and recreation values if road access is developed or mining activities occur adjacent to the protected area.*
- *To maintain the wilderness setting with few facilities.*

Key Considerations and Strategies

- Consider new facilities (trails, routes and structures) or additions to existing camps in selected locations subject to BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities.
- Allow motorboat use to continue on the Chukachida River and Chukachida Lake, consistent with historic types and levels of use.
- Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized uses.
- Consider commercial motorboat use on the Stikine River system above the Highway 37 Bridge only for drop-off and pick-up purposes of multi-day trips, and guide-outfitter support. Provide a limited number of trips by a maximum of 2 commercial operators.
- Monitor water quality in the Chukachida River prior to and after development if a bridge/road crossing is required.

- Work with the Ministry of Energy and Mines and with the mining industry to minimize and mitigate impacts on water quality, quantity and flow and other protected area values within Chukachida Protected Area if bridge/road crossing is required over the Chukachida River or if other mining activities occur in adjacent areas.
- Work with the Ministry of Energy and Mines and the mining industry to minimize and mitigate impacts on the Chukachida River wildlife movement corridor.
- Conduct stream inventories for the Chukachida River to identify important bull trout habitat and to collect basic aquatic information.
- Work with other agencies and First Nations to ensure that any potential bridge across the Chukachida River avoids crossing the river near important bull trout habitat.
- Work with other agencies and First Nations on access management if road access is constructed across the Chukachida River.
- Assess the extent and type of impacts of informal campsite use and develop site plans as needed. If necessary, remove some sites and designate formal camping areas.
- Monitor angling pressure on the Chukachida River prior to and after development if bridge/road crossing is required and revise angling regulations where required.

10.2.12 Gladys Lake Management Area

The Gladys Lake Management Area includes all of Gladys Lake Ecological Reserve, which is completed surrounded by Spatsizi Plateau Wilderness Provincial Park. The ecological reserve contains important ungulate habitat as well as plants and plant communities at risk. Gladys Lake Ecological Reserve's primary conservation role is to conserve an intact, undisturbed wilderness environment for Stone's sheep, mountain goat and grizzly bear. The ecological reserve also acts as a special benchmark for scientific research and education purposes. The presence of one of the main access trails to Spatsizi Plateau Wilderness Provincial Park, side routes, and a cabin on Gladys Lake present management challenges because outdoor recreation is not a use intended to be specifically accommodated or encouraged in ecological reserves. When the ecological reserve boundary was extended in 1979, existing horse and hiking use was occurring along the Eaglenest Trail through Danihue Pass and a number of other trails near and along the expanded boundary of the ecological reserve. Accommodation of this existing use was and is considered a reasonable compromise in expanding the ecological reserve to ensure better protection of the wildlife populations and their habitats.

Overall Direction

Gladys Lake Ecological Reserve will be managed to protect the Stone's sheep, mountain goat, caribou, grizzly bear populations and their associated habitats. Ecological education and research use will be accommodated under permit provided it is consistent with protecting ecological reserve values and consistent with this management plan. While it is recognized that non-guided public recreational use may occur given the ecological reserve's proximity to Cold Fish Lake, this use will not be encouraged or facilitated (e.g. maintenance or providing information on trails or structures). Horse and hiking use will be accommodated along the Eaglenest Trail through Danihue Pass and designated trails near and along the boundary of the ecological reserve. This horse and hiking use will be limited to supporting access to park lands beyond the ecological reserve for recreational use only (including lawful hunting), and supporting access within the ecological reserve for ecological education and research use only. All horse use and guided activities must be specifically authorized in writing by the Environmental Stewardship Division.

Management objectives and strategies below are intended to provide for this horse and hiking use. If the objectives or strategies prove not feasible in the future, then alternative approaches will be considered to ensure that the ongoing hiking and horse use can continue.

Management Objectives

- *To conserve the values for which the ecological reserve was established, including the protection of significant populations of Stone's sheep, mountain goat, caribou and grizzly bear, and their associated habitat.*
- *To encourage scientific research that focuses on naturally functioning ecosystems with a priority on Stone's sheep, mountain goat, caribou and grizzly bear populations and habitat, and on species and plant communities at risk.*
- *To protect the values of the ecological reserve while allowing reasonable access to Spatsizi Plateau Wilderness Provincial Park for recreational use (including lawful hunting) along designated trails.*
- *To accommodate guided and unguided ecological education.*

Key Considerations and Strategies

- Consider proposals for scientific research consistent with the objectives for the ecological reserve and this management plan. Research priorities include: naturally functioning ecosystems (including use of the ecological reserve as a benchmark for measuring the effects of human use that occurs in other areas); Stone's sheep, mountain goat, caribou and grizzly bear populations and habitat; and species and plant communities at risk.
- Allow access to the ecological reserve by foot only except for horse travel along the following specific trails - Eaglenest Creek Trail through Danihue Pass, Icebox Canyon Trail, Waterfall Creek Trail, and Paramount Trail (see Appendix 12 for a map showing designated trails in Gladys Lake Ecological Reserve).
- Persons authorized to use horses along the above trails will use their best efforts to prevent horses from wandering off the trails, or from adjacent camps, into the ecological reserve. If horses do wander into the ecological reserve or move into the ecological reserve as a reaction to predators, then the persons authorized to use the horses will be permitted to enter the ecological reserve to return the horses to the trails or camps as expeditiously as feasible, and the incident must be reported to a designated Ministry representative within a reasonable time.
- Reasonable maintenance of the above trails will be allowed subject to prior agreement on the type and extent of maintenance.
- Do not encourage or facilitate public outdoor recreation use of the ecological reserve (e.g. discontinue maintenance of the Gladys Lake Trail and remove references to the trail from all protected area brochures and the official Ministry of Water, Land and Air Protection web site).
- Allow the Airplane Creek Trail to remain open to hiking use subject to ongoing assessments of impacts on or conflicts with ecological reserve values.
- Close Gladys Lake to aircraft access, except for research and management purposes. Work with Transport Canada and other agencies to implement this closure.
- Allow use of the Gladys Lake cabin only for research and management purposes and remove any references to the Gladys Lake cabin from all protected area brochures and the

official Ministry of Water, Land and Air Protection web site to discourage outdoor recreation use.

- Review the need for maintenance of the Gladys Lake cabin for research purposes and assess the level of unauthorized recreation use of the cabin.
- Conduct regular impact assessments on the Eaglenest, Icebox Canyon, Waterfall Creek and Paramount trails to ensure that hiking and horse use do not result in unacceptable impacts on ecological reserve values. If necessary, close or relocate portions of trails to avoid further impacts while accommodating continued hiking and horse access to areas beyond the ecological reserve.
- Consider proposals for guided or unguided educational opportunities involving an approved educational plan and subject to a full assessment of potential impacts on ecological reserve values. Priority topics for educational activities are: the significance and intent of the Ecological Reserve system in British Columbia; the role of Gladys Lake Ecological Reserve in the protected areas system in British Columbia; Gladys Lake Ecological Reserve values; natural ecosystem function; wildlife ecology (especially on Stone's sheep, mountain goats, caribou and grizzly bears); boreal vegetation ecology; species and plant communities at risk; geological features and processes; and the role of humans in the ecosystem. Activities that compromise ecological reserve values will not be considered.
- Monitor permitted educational and research activities to assess ongoing use and implement any measures needed to reduce or eliminate unacceptable impacts.
- Clearly locate ecological reserve boundaries and trail locations using GPS technology to facilitate on the ground management.

10.2.13 Eaglenest/Plateau Management Area

The Eaglenest/Plateau Management Area covers most of the northern and western portion of Spatsizi Plateau Wilderness Provincial Park and the southern fringe of Stikine River Provincial Park between the Middle Stikine River Management Area and Spatsizi Plateau Wilderness Provincial Park. This management area contains most of the plateaus in this western area and the Eaglenest Range. The Eaglenest/Plateau Management Area also includes most of the Stone's sheep range in the park as well as important caribou, mountain goat and moose habitat, limited mule deer habitat near Hyland Post, and some plants and plant communities at risk.

Facilities in this management area include most of the popular trails within Spatsizi Plateau Wilderness Provincial Park, including Eaglenest Creek and McEwan Creek trails, and several non-permanent guide-outfitter camps. These facilities are well used, but the management area does not contain any major facility development such as main lodges. Much of the land-based and self-supported outdoor recreation use of Spatsizi Plateau Wilderness Provincial Park, such as hiking, hunting and horse trips, occurs within this management area. Horses are often used to access hunting areas.

This management area is zoned Wilderness Recreation. New structures, such as cabins or tent frames, will not be considered within this management area, although some trails may be developed if they do not pose unacceptable impacts to natural or cultural heritage values.

Management Objectives

- *To maintain wildlife populations and their habitat including Stone's sheep, mountain goat, caribou, moose and grizzly bear.*
- *To protect plants and plant communities at risk.*
- *To maintain the wilderness setting with few facilities.*
- *To protect Denkladia Mountain.*

Key Considerations and Strategies

- New trails and routes may be established only after conducting an impact assessment following the BC Parks Impact Assessment Process.
- New structures will not be considered in this management area.
- Allow helicopter landings only for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Allow commercial non-motorized winter recreation opportunities that use existing facilities if they do not pose unacceptable impacts on natural or cultural heritage values.
- Work with and explore partnerships with the Iskut First Nation, other agencies, commercial operators and NGOs in managing access along the BCR railroad grade.
- Work with the Tahltan Band Council and the Iskut First Nation to protect Denkladia Mountain by considering limiting access to the area.
- Evaluate areas of concentrated horse use (e.g. guide-outfitter camps) and develop strategies to minimize impacts of horse use if required.
- Conduct surveys of Stone's sheep in the Marion Wildlife Inventory Zone and establish long-term vegetation monitoring plots to monitor habitat quality at the recent Hyland Post burn, and determine the effects of the burn on lamb recruitment and population numbers.
- Consider conducting a prescribed burn near Hyland Post, to fulfil management objectives of the original prescribed burn, subject to consultation with the Tahltan Nation and affected stakeholders.
- Work with other agencies and First Nations to minimize and mitigate impacts of potential industrial activity and access in the Klappan drainage on protected area values.

10.2.14 Dawson/Tomias Management Area

The Dawson/Tomias Management Area contains most of the higher elevation area between the Spatsizi River to the west and the Stikine River to the south, east and north. The management area includes important caribou calving, summer, rutting and winter habitat, mountain goat and moose habitat, and limited Stone's sheep habitat. Outdoor recreation use of the Dawson/Tomias Management Area is lower than in western sections of Spatsizi Plateau Wilderness Provincial Park because of more difficult access and fewer facilities. Much of the use is by commercial operators providing hunting, hiking and horse travel trips. Horses are often used to access hunting areas. Facilities in this area include several non-permanent guide-outfitter camps and some routes mostly used for horse travel. The Dawson/Tomias Management Area is zoned Wilderness Recreation.

Management Objectives

- *To maintain wildlife populations and their habitat especially Stone's sheep, caribou, mountain goat and grizzly bear.*
- *To maintain the wilderness setting with few facilities.*

Key Considerations and Strategies

- New structures will not be considered in this management area.
- New trails and routes may be established only after conducting an impact assessment following the BC Parks Impact Assessment Process.
- Allow helicopter landings only for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Consider commercial non-motorized winter recreation opportunities that use existing facilities if they do not pose unacceptable impacts on natural and cultural heritage values.
- Protect important cultural heritage values in this area.
- Evaluate areas of concentrated horse use (e.g. guide-outfitter camps) and develop strategies to minimize impacts of horse use if required.

10.2.15 Stikine Headwaters Management Area

The Stikine Headwaters Management Area contains the upper reaches of both the Stikine and Spatsizi rivers. It covers much of the lower elevation area in Spatsizi Plateau Wilderness Provincial Park and all of the major lakes in the park. The management area contains mostly summer habitat for caribou, mountain goat, Stone's sheep, moose and grizzly bear and some significant moose and caribou winter range at the lower reaches of the Stikine and Spatsizi rivers within the management area. The lakes are home to most of the major facilities in the Stikine Country Protected Areas System, including the camps at Bug Lake, Cold Fish Lake, Laslui Lake and Buckinghorse Lake. The management area also contains the most scenic parts of the Stikine River and Spatsizi River canoe routes.

The main outdoor recreation activities in this management area are hiking, hunting, angling guiding, horse travel, and canoeing, with some motorboat and raft use. Cold Fish Lake Camp is a focus of land-based public outdoor recreation use, and a park host is present for four months of the year. The guide-outfitter camps provide a centre for commercial activity, which is mostly hunting and angling guiding, with some hiking, horseback riding and skiing trips.

Because of the above factors, the backcountry development pressures now and in the future are likely to be greater in this management area than in any other part of the Stikine Country Protected Areas System. The Stikine Headwaters Management Area is zoned Wilderness Recreation except for the main camps at Cold Fish Lake, Laslui Lake, Bug Lake, and Buckinghorse Lake, which are zoned Natural Environment.

Management Objectives

- *To maintain wildlife populations and wildlife habitat especially birthing habitat and moose and caribou winter range.*
- *To maintain the wilderness setting while allowing public and commercial recreation activity.*

- *To maintain Cold Fish Lake Camp for its traditional and historic value and with a priority for public outdoor recreation use.*

Key Considerations and Strategies

- Consider new facilities (trails, routes and structures) and additions to existing camps in selected locations subject to an impact assessment following BC Parks Impact Assessment Process. Strictly control the size, design and location of any new facilities. New shelters will be in the form of small, rustic backcountry shelters such as tent frames and small cabins. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities.
- Designate some lakes to remain free from any facility development to maintain their relatively undisturbed wilderness character.
- Work with the Tahltan Nation to implement a cultural heritage signage and interpretation program at Cold Fish Lake camp.
- Allow maintenance of and upgrades to Cold Fish Lake camp, subject to BC Parks Impact Assessment Process.
- Consider a range of opportunities that would result in self-sustaining maintenance of the Cold Fish Camp facilities, which retain traditional and historic values and provide for continued public use. Opportunities may include:
  - increased user fees;
  - public/private sponsorship; and,
  - operation of the facilities by the Tahltan Nation, NGOs and/or other public groups or partnerships.

  Any proposals would be considered in conjunction with the Nature Trust of British Columbia, the Tahltan Nation, and the proposed Stikine Country Protected Areas Advisory Committee.
- Continue to maintain the deactivated status of the Cold Fish Lake airstrip.
- Maintain the BC Parks motorboat at Cold Fish Lake for safety and management purposes and park host use only.
- Maintain the non-motorized use restriction on the Spatsizi River upstream of Hyland Post from breakup to September 1. One exception is provided to allow the guide-outfitter access to Bear Camp for maintenance purposes.
- Manage aircraft access to Happy Lake, the unnamed lake west of Tuaton Mountain and the unnamed lake west of Buckinghorse Lake.
- Encourage non-motorized boat users to travel at times when the chance of meeting motorboat users is minimal and provide them with information about motorized use.
- Allow motorboat use to continue on Buckinghorse, Bug, Cold Fish, Ella, Hotlesklwa, Laslui and Tuaton lakes, consistent with historic levels of use.
- Consider commercial non-motorized winter recreation opportunities where they do not pose unacceptable impacts on the natural and cultural heritage values.
- Work with and explore partnerships with the Iskut First Nation, other agencies, commercial operators and NGOs in managing access along the BCR railroad grade.
- Evaluate areas of concentrated horse use (e.g. guide-outfitter camps) and develop strategies to minimize impacts of horse use if required.
- Restore the Fountain Rapids campground area and designate formal camping areas to prevent further site damage if required.

- Discourage firewood collection at Fountain Rapids and provide visitors with information about collecting firewood prior to arriving at Fountain Rapids.
- Rehabilitate and improve the Fountain Rapids portage trail to avoid unacceptable impacts on wet areas.
- Work with other agencies and First Nations to minimize and mitigate potential impact of industrial activity and access near the Stikine Headwaters Management Area on protected area values, especially wildlife.
- Monitor river user experience and site impacts, and establish controls on river use, if needed, to maintain visitor satisfaction. Possible controls include numbers of groups, group size, trip timing and number of trips/day.

10.2.16 Metsantan Management Area

The Metsantan Management Area covers the Metsantan Addition to Spatsizi Plateau Wilderness Provincial Park. This management area contains the Caribou Hide and Metsantan village sites. The Tahltan Nation considers these areas to have extremely high cultural heritage significance to their people and thus they are zoned Special Feature. The remainder of the Metsantan Management Area is zoned Wilderness Recreation.

Outdoor recreation use of this management area is low which is appropriate for this sensitive cultural heritage site. Protection of the remaining buildings at the Metsantan village site is important to the Tahltan people.

Management Objectives

- *To protect the high cultural heritage values at the Caribou Hide and Metsantan village sites and to recognize other sites throughout the management area.*

Key Considerations and Strategies

- Work with the Tahltan Band Council and Iskut First Nation to develop a policy for the Metsantan site with respect to protection and possible rehabilitation of the traditional village site.
- New facilities (structures, trails and routes) will be considered for cultural and interpretive purposes only, after conducting an impact assessment following the BC Parks Impact Assessment Process.
- Allow helicopter landings only for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system. Manage aircraft access to Metsantan Lake.
- Protect cultural heritage values by maintaining a strict limit on the number of floatplane landings on Metsantan Lake.
- Work with other agencies and the Tahltan Band Council and Iskut First Nation by participating in planning and management of access from the Omineca Mining Road to minimize and mitigate impacts of that access on cultural heritage values in the Metsantan Management Area.
- Work with the Tahltan Band Council and Iskut First Nation to develop an access management plan for the Metsantan village site.

- Work with other agencies and the Tahltan Band Council and Iskut First Nation to minimize and mitigate impacts of potential industrial activity and access in the vicinity of Metsantan Management Area on protected area values.
- Establish an Initial Attack Zone for fire suppression in the Metsantan Management Area.

10.2.17 Chapea Management Area

The Chapea Management Area is located on the east side of Spatsizi Plateau Wilderness Provincial Park and includes most of the Chapea Creek drainage. This management area contains some high value caribou habitat in the Edozadelly Mountain area; outdoor recreation use is extremely low as it is remote and contains no facilities or trails. The Chapea Management Area is zoned Wilderness Recreation.

Management Objectives

- *To maintain caribou and their summer and rutting habitat.*
- *To maintain the wilderness setting with no facilities.*

Key Considerations and Strategies

- New structures will not be considered in this management area.
- New trails and routes may be established only after conducting an impact assessment following BC Parks Impact Assessment Process.
- Allow helicopter landings only for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Work with other agencies and First Nations to minimize and mitigate the effects of potential industrial activity and access in the area to the east of Chapea Management Area on protected area values.

10.2.18 Tatlatui Management Area

The Tatlatui Management Area includes all of Tatlatui Provincial Park and contains mostly spring, summer and fall habitat for caribou, moose, mountain goat and grizzly bear, and a rainbow trout only fish system in all waters of the park. The angling guides and guide-outfitters based on several lakes in Tatlatui Provincial Park are the park's primary users. These guides have permanent camps at five locations in the park: two locations on the Firesteel River, and on Kitchener, Stalk and Tatlatui lakes. In addition, a public use cabin exists on Kitchener Lake.

Most of the recreation use in this park is commercial and related to hunting and angling because of the park's remote location from access points. Angling guiding is concentrated on the Firesteel River, leading to some pressures on the wilderness values in this management area.

The Tatlatui Management Area is zoned Wilderness Recreation except for camps at Tatlatui Lake, Kitchener Lake, Stalk Lake and the Firesteel River (two sites) which are zoned Natural Environment.

Management Objectives

- *To maintain wildlife populations and their habitat.*

- *To maintain the wilderness quality of visits to this remote area with few facilities.*
- *To manage aircraft access levels and patterns to maintain the wilderness experience of users.*

Key Considerations and Strategies

- New trails and routes may be established only after conducting an impact assessment following BC Parks Impact Assessment Process.
- Consider allowing an additional structure in Tatlatui Provincial Park to support guiding hunting activities only, subject to BC Parks Impact Assessment Process, BC Parks Design Guidelines, consultation with affected users, and no significant impacts on other existing operations in the park. Other new structures will not be considered in this management area.
- Allow motorboat use to continue on Kitchener, Stalk, and Tatlatui lakes, and on the Firesteel River consistent with historic levels of use.
- Manage aircraft access to Hoy Lake and the unnamed lake southwest of Kitchener Lake.
- Encourage affected stakeholders to develop an acceptable strategy for dealing with current user issues in Tatlatui Provincial Park.
- Consider commercial non-motorized winter recreation opportunities that use existing facilities where they do not pose unacceptable impacts on natural and cultural heritage values.
- Allow no more than three angling guides to conduct angling guiding activities. No new angling guides will be allowed in this management area.
- Establish a working group consisting of government staff, First Nations, angling guides, anglers, and other stakeholders to develop specific guidelines for angling and angling guide management in Tatlatui Provincial Park. Consider defining an angling zone for each waterbody or adjoining waterbodies, classifying waterbodies (or angling zones) into angling experience categories, and assigning rod-days by experience category, or other approaches for managing guided angling use.
- Work with other agencies and First Nations by participating in the planning and management of access from the Omineca Mining Road, to minimize and mitigate impacts of that access on Tatlatui Provincial Park.
- Work with other agencies and First Nations to minimize and mitigate impact of potential industrial activity and access in the area surrounding the park on protected area values.
- Assess and confirm reported mountain pine beetle outbreaks and develop a strategy for managing these mountain pine beetle outbreaks if necessary.
- Conduct ground investigations to confirm sightings of pikas and melanistic chipmunks and, if required, determine their extent and range.
- Focus outdoor recreation activities in the eastern portion of the park where grizzly habitat values and use are lower to minimize potential interactions between bears and humans.

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.

Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
VOLCANIC PLATEAU				
• Mount Edziza volcano • Spectrum Range • cinder cones • hotsprings • calcite deposits • obsidian deposits • Pipe Organ Mountain • plants at risk (alpine and hot springs) • most of the Stone's sheep and mountain goat range in Mount Edziza Park • most of the Mount Edziza caribou herd's summer range	• Dominion Telegraph Trail • Mount Edziza Trail • trapline cabin on Mess Lake • guide-outfitter camp on Mess Lake	• Wilderness Recreation • Special Feature around cinder cones and hotsprings/ calcite deposits	Structures: • No Trails/Routes: • No	• Maintain the ban on helicopter landings on cinder cones and implement a ban on helicopter landings on calcite deposits at hotsprings • Restrict access up Eve Cone to the marked trail • Build designated trails at hot springs if necessary • Maintain the ban on wheeled aircraft landings • Develop and provide park visitors with information on the cultural importance of obsidian deposits to the Tahltan people, the fragile nature of lichen crust communities on cones and vegetation at risk at hotsprings and in the alpine
BUCKLEY LAKE				
• Tahltan Eagle • canyon features along Stikine River and Mess Creek including dry steppe plant communities at risk • Mount Edziza caribou herd's winter range • mule deer habitat	• Mount Edziza Trail • Klastline/Telegraph Creek Trail • rustic campsite and guide-outfitter camp at Buckley Lake • 2 trapline cabins on Mess Creek • old village site near Telegraph Creek • some old cabins in the Buckley Lake area	• Wilderness Recreation	Structures: • small rustic backcountry shelters west of Mess Creek • non-permanent structures only east of Mess Creek • subject to BC Parks Impact Assessment Process[1] Trails/Routes: • subject to BC Parks and Protected Areas Impact Assessment Policy procedures	• Conduct a study on winter range use of caribou using radio-collared caribou • Map plants at risk and dry steppe plant communities along the Stikine River, Klastline River and Mess Creek and protect them from human disturbance • Investigate the current population structure of trout in Buckley Lake and monitor angling pressure • Further stocking of Buckley Lake will not be allowed

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.				
		Management Direction		
Natural and cultural heritage values	Existing facilities and recreational values	Zone	New Facilities	Other direction
KLASTLINE				
• mule deer habitat • some caribou winter range • canyon features along the Klastline River	• Klastline/Telegraph Creek Trail	• Wilderness Recreation	Structures • small rustic backcountry shelters • subject to BC Parks Impact Assessment Process[1] Trails/Routes • subject to BC Parks Impact Assessment Process	• Follow Cassiar Iskut-Stikine LRMP guidelines regarding snowmobile use, motorized use and cabin construction • Map mule deer winter range • Develop snowmobile use guidelines along Klastline Trail with the Tahltan Band Council and the Iskut First Nation • Review bridge placement options over Klastline River with the Tahltan Band Council and the Iskut First Nation
KAKIDDI LAKES				
• Rainbow trout only fish system	• Mount Edziza Trail • Mowdade Lake campsite	• Wilderness Recreation	Structures • small, rustic backcountry shelters • subject to BC Parks Impact Assessment Process Trails/Routes • subject to BC Parks Impact Assessment Process	• Work with other agencies, the First Nations and the mining industry to monitor, minimize and mitigate impacts on water quality, quantity and flow and other protected area values if a mining road is developed or if mining activities occur adjacent to the park • Monitor angling pressure and water quality of the Kakiddi Lakes chain before and after development if a road is required • Evaluate the potential of the Kakiddi Lakes chain as a canoe route

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.				
Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
MOUNT EDZIZA PROTECTED AREA				
• Rainbow trout only fish system		• Wilderness Recreation • Natural Environment around potential mining road if developed	Structures: • small, rustic backcountry shelters • subject to BC Parks Impact Assessment Process[1] Trails/Routes: • subject to BC Parks Impact Assessment Process	• Work with other agencies, First Nations and the mining industry to monitor, minimize and mitigate impacts on water quality, quantity and flow and other protected area values if a mining road is developed or if other mining activities occur, and to follow LRMP recommendations for road development in the proposed Mount Edziza Protected Area • Monitor angling pressure on Kakiddi Lakes chain before and after development if a road is required • Install a gate on any road through the proposed Mount Edziza Protected Area and deactivate once use associated with mining is finished • Evaluate the need to develop a portage trail to supply canoe access to Nuttlude Lake if road construction occurs
STIKINE GRAND CANYON				
• Grand Canyon of the Stikine River • Stikine Canyon mountain goat population • rare steppe plant communities	• mountain goat/canyon viewing	• Wilderness Recreation • Special Feature around the Grand Canyon of the Stikine River itself	• Wilderness Recreation Zone only Structures: • small, rustic backcountry shelters • subject to BC Parks Impact Assessment Process[1] Trails/Routes: • subject to BC Parks Impact Assessment Process	• Continue no flying zone below the rim of the Grand Canyon of the Stikine River from May 15 to July 15 • Continue other flight avoidance specifications for mountain goats in the Grand Canyon • Closely monitor effects of sightseeing flights on mountain goats • Initially, develop one trail or route to the Grand Canyon of the Stikine River, and a pull out for the trail on the Telegraph Creek Road • Consider restrictions on hunting of mountain goats in viewing areas of the Grand Canyon of the Stikine River in consultation with affected user groups • Follow Cassiar Iskut-Stikine LRMP direction • Map and protect dry steppe plant communities

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.

Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
MIDDLE STIKINE RIVER				
• caribou winter range from Beggerlay Creek upstream • moose habitat • portion of the only fully protected area in B.C. enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories	• trapline cabin near the McBride River • BC Parks and Protected Areas Branch cabin near the confluence of the Stikine and Spatsizi rivers • BCR railroad bridge over the Stikine River • foot bridge over Beggerlay Creek • lower portion of the Stikine River and Spatsizi River canoe routes • commonly used area by floatcraft and motorboats • guide-outfitter camp just downstream from the confluence of the Stikine and Spatsizi rivers	• Wilderness Recreation • Intensive Recreation around Highway 37 bridge • Natural Environment at the guide-outfitter camp just downstream from the confluence of the Stikine and Spatsizi rivers • Natural Environment on the water portion of the Stikine and Pitman rivers	Structures • small, rustic backcountry shelters • subject to BC Parks Impact Assessment Process[1] Trails/Routes • subject to BC Parks Impact Assessment Process	• Follow Cassiar Iskut-Stikine LRMP direction • Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized users • Monitor river user experiences and site impacts and establish controls on river use if necessary • Work with other agencies and First Nations to minimize and mitigate impacts from industrial activities and road access in adjacent areas on water quality and other protected area values • Maintain access opportunities at Highway 37 bridge • Consider road access to potential frontcountry type development at the Highway 37 bridge • Investigate developing a trail for half to full day frontcountry hiking trips and/or an interpretive trail in the Stikine River bridge area • Encourage all river users to practice no-trace camping techniques
KEHLECHOA				
• high value low elevation caribou winter range • high value moose habitat • high elevation Stone's sheep habitat • high elevation mountain goat habitat • portion of the only fully protected area in B.C. enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories		• Wilderness Recreation	Structures • No • Exception: to support existing tenures (subject to BC Parks Impact Assessment Process) Trails/Routes • subject to BC Parks Impact Assessment Process	• Focus on maintaining caribou and caribou winter habitat and Stone's sheep and mountain goat populations and habitat • Work with other agencies and First Nations to minimize and mitigate impact from industrial activities and road access in adjacent areas on protected area values

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.

Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
UPPER STIKINE				
• high value low elevation caribou habitat • high value low elevation moose habitat • portion of the only fully protected area in B.C. enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories	• guide-outfitter camp at Hyland Post on private property • guide-outfitter cabin near the confluence of the Stikine and Chukachida rivers • portion of the Stikine River and Spatsizi River canoe routes	• Wilderness Recreation • Natural Environment on the water portion of the Stikine and Pitman rivers, and on the water portion of the Spatsizi River downstream from Hyland Post	Structures: • No Trails/Routes • subject to BC Parks Impact Assessment Process	• Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized users • Monitor river user experiences and site impacts and establish controls on river use if necessary • Work with other agencies and First Nations to minimize and mitigate impacts from industrial activities and road access in adjacent areas on water quality and other protected area values • Maintain the non-motorized use restriction on the Spatsizi River upstream of Hyland Post from breakup to September 1, with an exception for the guide-outfitter to access Bear Camp for maintenance purposes
PITMAN RIVER				
• high value low elevation moose habitat • portion of the only fully protected area in B.C. enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories • wildlife movement corridor to wildlife habitat to the east	• guide-outfitter camp at Pitman Lake	• Wilderness Recreation • Natural Environment on the water portion of the mainstem of the Pitman River • Natural Environment around potential mining road if developed	Structures: • small, rustic backcountry shelters • subject to BC Parks Impact Assessment Process[1] Trails/Routes: • subject to BC Parks Impact Assessment Process	• Follow Cassiar Iskut-Stikine LRMP direction • Conduct stream inventories to identify important bull trout information • Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized users • Work with other agencies and First Nations to monitor, minimize and mitigate impacts on water quality and other protected area values if road access is developed through Pitman River Protected Area or if industrial activities occur in adjacent areas

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.				
Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
CHUKACHIDA				
• high value low elevation moose habitat • portion of the only fully protected area in B.C. enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories • wildlife movement corridor to wildlife habitat to the east	• trapline cabin at Chukachida Lake • guide-outfitter cabin at Chukachida Lake	• Wilderness Recreation • Natural Environment on the water portion of the mainstem of the Chukachida River • Natural Environment around potential mining road if developed	Structures: • small, rustic backcountry shelters • subject to BC Parks Impact Assessment Process Trails/Routes: • subject to BC Parks Impact Assessment Process	• Follow Cassiar Iskut-Stikine LRMP direction • Conduct stream inventories to identify important bull trout habitat • Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized uses • Work with other agencies and First Nations to monitor, minimize and mitigate impacts on water quality and other protected area values if road access is developed through Chukachida Protected Area or if industrial activities occur in adjacent areas
EAGLENEST PLATEAU				
• most of the Stone's sheep range in Spatsizi Plateau Wilderness Provincial Park • high value caribou, mountain goat and grizzly bear habitat • mule deer habitat at Hyland Post • plants and plant communities at risk • portion of the only fully protected area in B.C. enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories	• Eaglenest Creek Trail • McEwan Creek Trail • other popular trails • several non-permanent guide-outfitter camps • most of the land based and self-supported recreational use of Spatsizi Plateau Wilderness Provincial Park occurs in this area	• Wilderness Recreation	Structures: • No Trails/Routes: • subject to BC Parks Impact Assessment Process	• Conduct Stone's sheep surveys and long-term vegetation monitoring to monitor the effects of the recent Hyland Post burn • Evaluate areas of concentrated horse use and develop strategies to minimize impacts of horse use, if required • Work with and explore partnerships with the Iskut First Nation, other agencies, commercial operators and NGO's in managing access along the BCR railroad grade • Work with other agencies and First Nations to minimize and mitigate impacts of potential industrial activity and access in the Klappan drainage on protected area values

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.

Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
GLADYS LAKE				
- high value Stone's sheep, caribou, mountain goat and grizzly bear habitat - plants and plant communities at risk	- Eaglenest Creek Trail (Danihue Pass) - Icebox Canyon Trail - Waterfall Creek Trail - Airplane Valley Trail - Paramount Trail - research cabin at Gladys Lake	- Ecological Reserve (zoning not applicable)	- No	- Allow access to the reserve by foot only. Horse travel will be allowed along Eaglenest Creek Trail through Danihue Pass, Icebox Canyon Trail, Waterfall Creek Trail, and Paramount Trail as shown in Appendix 12. Reasonable maintenance of these trails will be allowed subject to prior agreement on the type and extent of maintenance, and regular impact assessments will be conducted. - Discontinue maintenance of Gladys Lake Trail and remove mention of the trail and Gladys Lake cabin from brochures and the website - Allow Airplane Creek Trail to remain open to hiking use subject to ongoing assessments of impacts - Close Gladys Lake to aircraft access except for research and management - Allow use of Gladys Lake cabin only for research and management and review the level of use of the cabin - Consider proposals for scientific research consistent with the objectives for the reserve and this management plan - Consider proposals for guided or unguided educational opportunities involving an approved educational plan and subject to a full assessment of potential impacts on ecological reserve values
DAWSON/TOMIAS				
- high value caribou calving, summer, rutting and high elevation winter habitat - mountain goat, moose and grizzly bear habitat - limited Stone's sheep habitat	- several non-permanent guide-outfitter camps	- Wilderness Recreation	Structures: - No Trails/Routes: - subject to BC Parks Impact Assessment Process	- Evaluate areas of concentrated horse use and develop strategies to minimize impacts of horse use if required

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.

Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
STIKINE HEADWATERS				
• mostly summer habitat for caribou, mountain goats, moose and grizzly bears • significant caribou and moose winter habitat at the lower reaches of the Stikine and Spatsizi rivers within the area • limited Stone's sheep habitat • portion of the only fully protected area in B.C. enclosing contiguous streams, large rivers and lakes believed to support blue-listed bull trout in the full diversity of its life histories	• Cold Fish Lake Camp (BC Parks/Nature Trust) • several guide-outfitter camps including Bug Lake, Laslui Lake and Buckinghorse Lake • most of the facilities within Spatsizi Plateau Wilderness Provincial Park are located in this area • contains the most scenic portions of the Stikine River and Spatsizi River canoe routes	• Wilderness Recreation • Natural Environment at camps at Laslui Lake, Bug Lake and Cold Fish Lake	Structures • small, rustic backcountry shelters • subject to BC Parks Impact Assessment Process[1] Trails/Routes • subject to BC Parks Impact Assessment Process	• Evaluate areas of concentrated horse use and develop strategies to minimize impacts of horse use, if required • Maintain Cold Fish Lake camp for its traditional and historical value with a priority for public outdoor recreation use • Designate some lakes to remain free from any facility development to maintain their relatively undisturbed wilderness character • Maintain the Parks and Protected Areas Section motorboat at Cold Fish Lake camp for safety and management purposes and park host use only • Continue deactivated status of Cold Fish Lake airstrip • Restore the Fountain Rapids campground area and portage trail, and designate formal camping areas if required to prevent further impacts • Discourage firewood collection at Fountain Rapids • Work with other agencies and the First Nations to minimize and mitigate impacts of potential industrial activity and access adjacent to the management area on protected area values • Work with other agencies, the Iskut First Nation, commercial operators and NGO's and to manage access along the BCR railroad grade • Maintain the non-motorized use restriction on the Spatsizi River upstream of Hyland Post from breakup to September 1, with an exception for the guide-outfitter to access Bear Camp for maintenance purposes • Monitor river user experience and site impacts, and establish controls on river use, if needed

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.

Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
METSANTAN				
• Caribou Hide and Metsantan village sites		• Wilderness Recreation • Special Feature around Caribou Hide and Metsantan village sites	• for cultural and interpretive purposes only Structures: • subject to BC Parks and Protected Areas Impact Assessment Policy procedure[1] Trails/Routes: • subject to BC Parks Impact Assessment Process	• Work with other agencies and the Tahltan Band Council and Iskut First Nation to minimize and mitigate impacts of potential industrial activity and access adjacent to the Metsantan area on protected area values • Work with the Tahltan Band Council and Iskut First Nation to develop a policy for the Metsantan site with respect to protection and possible rehabilitation of the traditional village site • Work with other agencies and First Nations by participating in planning and management of access from the Omineca Mining Road to minimize and mitigate potential impacts on protected area values • Establish an Initial Attack zone for fire suppression over the whole management area
CHAPEA				
• high value caribou summer and rutting habitat	• No facilities	• Wilderness Recreation	Structures: • No Trails/Routes: • subject to BC Parks Impact Assessment Process	• Work with other agencies and the First Nations to minimize and mitigate impacts of potential industrial activity and access in the area adjacent to the east on protected area values

Table 5. Key values and management direction for Management Areas in the Stikine Country Protected Areas.

Natural and cultural heritage values	Existing facilities and recreational values	Management Direction		
		Zone	New Facilities	Other direction
TATLATUI				
• mostly spring, summer and fall habitat for caribou, moose, mountain goat and grizzly bear • limited Stone's sheep range • rainbow trout only fish system	• guide-outfitter camps on the Firesteel River (2), Kitchener Lake, Stalk Lake, and Tatlatui Lake • public use cabin on Kitchener Lake	• Wilderness Recreation • Natural Environment at camps at Tatlatui Lake, Kitchener Lake, Stalk Lake and the Firesteel River (2 sites)	Structures: • 1 new structure in Tatlatui Provincial Park for guided hunting purposes only; subject to BC Parks Impact Assessment Process, consultation with affected stakeholders, and no significant impacts on other existing operations in the park • No other new structures Trails/Routes: • subject to BC Parks and Protected Areas Impact Assessment Policy procedure	• Work with other agencies and First Nations to minimize and mitigate impacts of potential industrial activity and access in the area surrounding the park on protected area values • Work with other agencies and First Nations in the planning and management of access from the Omineca Mining Road to minimize and mitigate potential impacts on protected area values • Encourage affected stakeholders to develop an acceptable strategy for dealing with current user issues in Tatlatui Provincial Park • Allow no more than 3 angling guides to conduct guided angling activity. No new angling guides will be allowed. • Establish a working group consisting of government staff, First Nations, angling guides, anglers, and other stakeholders to develop specific guidelines for angling and angling guide management in Tatlatui Provincial Park. Consider defining an angling zone for each waterbody or adjoining waterbodies, classifying waterbodies (or angling zones) into angling experience categories, and assigning rod-days by experience category or other approaches for managing guided angling use. • Assess and confirm reported mountain pine beetle attack and develop a management strategy if necessary • Confirm sightings of pikas and melanistic chipmunks • Focus recreational activities in the eastern portion of the park, where grizzly habitat values are lower, to minimize interactions between bears and humans

[1] Size, design and location of new structures in all management areas will be strictly controlled

11 Visitor Information

11.1 Introduction

Stikine Country Protected Areas are largely wilderness areas with low use levels and little infrastructure. Visitors expect undisturbed wilderness when they travel to these protected areas, but also have a responsibility to help preserve this environment during their stay. Many Stikine Country Protected Areas have relatively low visitor use levels; contacts among users are infrequent outside of staging areas such as Cold Fish Lake Camp. Some potential exists for contact between motorized and non-motorized users on the Stikine River and its tributaries; however, this contact occurs primarily in the autumn when jet boats are used to access hunting areas.

The remoteness of Stikine Country Protected Areas also means that visitors will need to be fully independent and self-reliant as even the access points can be far from assistance. Visitors need to be prepared for all weather conditions, including snow, which can fall at any time at higher elevations. The trails within these protected areas are often little more than routes, so good map reading and navigation skills are essential.

Currently, information on the Stikine Country Protected Areas System is distributed to protected area visitors through brochures, signs, Environmental Stewardship Division offices and the Ministry of Water, Land and Air Protection official web site (http://wlapwww.gov.bc.ca/bcparks/index.htm). Protected area visitors travelling through the region may also obtain some information from Tourist Information Centres. Most of this information focusses on outdoor recreation activities (e.g. designated trails and campsites, allowable outdoor recreation activities, access) with limited interpretive information.

11.2 Orientation Information

Orientation information provided to visitors in brochures and signs assists people in becoming familiar with protected areas and the opportunities available within them. In-park handouts usually contain maps and show people the location of facilities such as trails and campsites. These brochures also inform visitors about backcountry etiquette, safety concerns, and provincial park regulations.

Stikine Country Protected Areas sustain healthy populations of many animal species including grizzly and black bear, mountain goat, caribou, Stone's sheep, moose and wolf. People will likely encounter some of these animals during their visits to the protected areas. Interactions with bears, however, are of special concern because of the potential harm to visitors and impacts on the bears. Visitors need to be aware of bear encounter avoidance techniques to reduce this potential.

11.2.1 General Management Direction

Overall Direction

Protected area brochures and other orientation material will continue to provide protected area visitors with up-to-date information subject to available funding. Educational material for protected area visitors will include information on how to avoid impacts to protected area values and how to avoid negative interactions with bears.

Objectives and Strategies

To provide information to visitors that is consistent, pertinent and accurate, and helps conserve the values of Stikine Country Protected Areas identified in this management plan.

- Ensure that information about the Stikine Country Protected Areas System is current and accurate.
- Ensure that information on the Stikine Country Protected Areas System reflects the management direction given in this document and includes backcountry etiquette, safety concerns and protected area regulations.
- Investigate the possibility of developing a small visitor centre with other agencies, First Nations, commercial operators and NGOs as potential partners.
- Evaluate the need for a structured orientation session focussed on bear awareness and avoidance and backcountry etiquette intended for visitors to the Stikine Country Protected Areas System. Examine the most cost-effective locations and method for the delivery of such sessions.
- Place orientation information about the Stikine Country Protected Areas System at staging areas to reach visitors.
- Develop partnerships and promote sponsorships to enable visitor information to be delivered.

11.3 Marketing and Promotion

The marketing and promotion of a protected area can affect the level and type of use the protected area receives. Thus, the marketing efforts and promotional materials must reflect the management goals of the protected area. The management goals of Stikine Country Protected Areas advocate the maintenance of the protected area natural, cultural heritage and wilderness values, while still providing outdoor recreation opportunities. Care must be taken not to promote Stikine Country Protected Areas to such a degree that increased levels of use compromise protected area wilderness experiences and natural or cultural heritage values.

Other groups, such as tourism organizations, lodge operators, and guide-outfitters also promote protected areas. These groups must cooperate closely with the Environmental Stewardship Division to ensure that their promotional material and level of marketing is consistent with the management direction for these protected areas.

11.3.1 General Management Direction

Overall Direction

Promotional material will inform people about the protected areas and educate visitors about the natural, cultural heritage and wilderness values of Stikine Country Protected Areas. Environmental Stewardship Division will market Stikine Country Protected Areas using a relatively low profile, in harmony with the values of the protected areas.

Objectives and Strategies

To ensure that promotional material and the amount of marketing for Stikine Country Protected Areas is consistent with the protection of wilderness, natural and cultural heritage values.

- Provide promotional material that ensures visitors are aware and respectful of the wilderness, natural and cultural heritage values of the protected areas.
- Monitor use levels and adjust levels of marketing and promotion to help maintain wilderness, natural and cultural heritage values.
- Ensure that commercial promotion is consistent with protected area values and management direction.

11.4 Interpretation

Interpretation provides opportunities to educate the public about protected areas, protected area cultural heritage and natural values, outdoor recreation opportunities, and appropriate backcountry conduct. Currently most of the information about Stikine Country Protected Areas focuses on orientation. A visitor centre in the Stikine Region would facilitate an expanded interpretation program about Stikine Country Protected Areas. This centre could be developed as a joint project between Environmental Stewardship Division, the Tahltan Nation, local tourism and other commercial operators, and NGOs. Interpretive themes are listed in Table 6. Interpretation plays a critical role in protected area visitor awareness, appreciation and understanding of the effects of their presence in the protected areas system.

11.4.1 General Management Direction

Overall Direction

Interpretation of protected area values is a critical component of conserving natural, cultural heritage and outdoor recreation values in Stikine Country Protected Areas. Interpretation will focus on protected area values and the role of protected area visitors and the public in conserving those values and will be subject to partnerships and sponsorship being developed to fund and implement specific initiatives.

Objectives and Strategies

To provide interpretive information to protected area visitors and to tourists traveling along Highway 37.

- Investigate the possibility of developing a small visitor centre with other agencies, First Nations, commercial operators and NGOs as potential partners.
- Develop partnerships and promote sponsorships to enable visitor information to be delivered.
- Develop additional interpretive material on the interpretive themes listed above and provide it in tourist information centres, in protected areas near access points (e.g. Stikine River Bridge), and on the Ministry of Water, Land and Air Protection official web site.
- Investigate developing an interpretive trail in a frontcountry area (e.g. Stikine River Bridge, Stikine River Provincial Park on the Telegraph Creek Road).
- Work with First Nations to include cultural heritage information, First Nations art and design and First Nations place names where appropriate, and interpretive material, maps and signs.

- Work with the Tahltan Nation to support (where feasible) their plans to establish a Cultural Heritage Committee and a Cultural Heritage Centre.

To educate protected area visitors on how to avoid impacts on natural and cultural heritage values.

- Provide outdoor recreation users and commercial operators with information on the significance of geologic features, their vulnerability to human disturbance and appropriate activities adjacent to and within these areas.
- Provide visitors and commercial operators with information on the significance of species at risk and their habitat and impacts from human disturbance.
- Provide visitors and commercial operators with information on the significance of wildlife habitat and impacts from disturbance, especially those habitats highly sensitive to disturbance.
- Provide visitors and commercial operators with information on how to avoid human/bear interactions.

Table 6. Interpretive themes for the Stikine Country Protected Areas System.

Broad Themes	Specific Subject Area
First Nations	• Village sites. • Obsidian. • Hunting, trapping and fishing. • Culture. • Legend sites and archaeological sites. • Trade routes and trails.
Wildlife	• Predator/prey dynamics. • Large mammal species. • Habitat use. • Species at risk and unique/sensitive species. • Rare and endangered species.
Aquatics	• Monocultures of rainbow trout. • Bull trout. • Barriers to fish migration. • Arctic and Pacific systems.
Geological Processes and Features	• Volcanism. • Erosion. • Glaciation. • Grand Canyon of the Stikine River. • Spectrum Range and Mount Edziza. • Fossils. • Hot springs and geothermal phenomena.
Vegetation	• Natural disturbances. • Plants and plant communities at risk. • Plant succession.
Human history	• Aboriginal – pre-contact. • Aboriginal and non-aboriginal – post-contact.
Role of visitors in maintaining natural, cultural heritage and outdoor recreation values:	• Human and bear interactions. • Non-native species. • No trace camping. • Backcountry etiquette. • Wilderness travel and safety.

12 Managing Commercial Activities, Other Tenures and Protected Area Operations

12.1 Commercial Recreation Opportunities and Tenure Management

Many commercial tenures and outdoor recreation opportunities exist within Stikine Country Protected Areas. Environmental Stewardship Division will work to ensure that all commercial operators are under park use permit. Existing tenure holders expect to be treated in a fair and open manner. Nine guide-outfitters have all or part of their territory within Stikine Country Protected Areas. Seven angling guides have park use permits to operate on a total of 22 lakes and rivers in the Stikine Country Protected Areas System. Also, seventeen recreation guiding park use permits have been granted for activities such as hiking, canoeing, rafting, skiing, horseback tours and jet boating.

New commercial outdoor recreation opportunities exist in Stikine Country Protected Areas. Environmental Stewardship Division may use two methods to provide tenure for these opportunities: first–come/first–serve and Request for Proposals (RFP). In general, current policy indicates that non-exclusive opportunities will be handled on a first–come/first–serve basis, while exclusive opportunities will be handled through the RFP method. Each application will be assessed on its own merits with a vision to minimize user conflicts and social and environmental impacts, while maximizing opportunities for visitor enjoyment in a wilderness protected area setting. Environmental Stewardship Division must also provide tenure in a manner that recognizes the local community, while not excluding outside interests. In addition, tenure length must be sufficient to provide viable business opportunities. Environmental Stewardship Division will pursue partnerships with commercial operators to assist with maintaining protected area facilities.

Environmental Stewardship Division will actively monitor commercial recreation activities for environmental impacts and user conflicts and, when appropriate, will take management action to restrict, limit and/or increase special provision operating procedures within the park use permit. Environmental Stewardship Division will consult with commercial operators before implementing any changes.

The Cassiar Iskut-Stikine LRMP provided the following recommendations for the management of new protected areas and protected area additions (Cassiar Iskut-Stikine LRMP 2000):

- *Include consultation with tourism industry representatives during management planning processes in order to examine potential commercial opportunities within provincial parks, subject to the primary goal of protecting conservation, recreation and cultural heritage values within protected areas.*
- *Assess commercial opportunities with regard to their compatibility with protected area management plans and, where appropriate, their contribution to the local economy and local employment.*
- *Include local employment and business creation as criteria for awarding commercial park use permits.*

- *Work with local tourism operators and communities to ensure that information on recreation opportunities in protected areas is available and accurately described consistent with values in protected areas.*
- *Provide information to local communities on potential economic and employment opportunities associated with protected areas.*

Balancing public and commercial recreation use is important to ensure fairness of access to the protected area and to protect the natural and cultural heritage values that contribute to the outdoor recreation experience. Commercial use must not displace public or non-commercial recreation use.

12.1.1 General Management Direction

Overall Direction

Commercial opportunities will be made available using a fair and open process. Environmental Stewardship Division policy normally governs the awarding of exclusive opportunities. In addition, Environmental Stewardship Division will work with First Nations and local communities to ensure that, to the extent possible, new opportunities made available are in line with the capacity and readiness of local entrepreneurs. Any increase in commercial recreation activities will occur incrementally. In general, commercial and public opportunities (except hunting and angling) will be in balance where use levels are limited. The *Wildlife Act* regulates levels of public and commercial use in areas of hunting, angling and trapping. Concerning commercial operators in Stikine Country Protected Areas, the objectives of Environmental Stewardship Division are:

- to contribute to the sound and sustainable economic growth of the region through the management of the direct contribution to the economy from appropriate commercial outdoor recreation services and indirectly through the attraction of residents and non-commercial tourists to this area in particular and British Columbia in general;
- to establish successful stable operators delivering quality services compatible with the management direction for the Stikine Country Protected Areas System and who are responsive to advice and direction from Environmental Stewardship Division;
- to foster public appreciation and support for British Columbia's protected areas system;
- to protect and manage the natural, cultural heritage and recreation resources in Stikine Country Protected Areas consistent with the Stikine Country Protected Areas Management Plan and the Tahltan/BC Parks Agreement with the Tahltan Band Council and Iskut First Nation; and,
- to provide for a fair financial return to the province for commercial opportunities tenured within the Stikine Country Protected Areas System.

Objectives and Strategies

To provide commercial recreation opportunities consistent with conservation and outdoor recreation objectives.

- Provide information to local communities about upcoming opportunities for employment and economic development and work with entrepreneurs to ensure that:
  - ➢ procedures and rules for accessing opportunities are readily available; and,
  - ➢ timing and scope of opportunities, to the extent practical, are consistent with local capacity.

- Manage non-exclusive commercial recreation opportunities on a first-come/first serve basis.
- Manage exclusive commercial recreation opportunities and non-exclusive commercial recreation opportunities where limits have been established subject to Environmental Stewardship Division policy. If a Request for Proposals is used, evaluate proposals considering criteria such as:
  - benefits to the protected area and protected area values;
  - quality of visitor services;
  - qualifications and expertise;
  - financial and corporate capacity;
  - financial return to the province; and,
  - benefits to the local community.
- Manage establishment of new structures subject to Environmental Stewardship Division policy and BC Parks Impact Assessment Process.
- Evaluate new commercial recreation opportunities subject to the BC Parks Impact Assessment Process.
- Follow direction from the Cassiar Iskut-Stikine LRMP for commercial recreation opportunities in new protected areas and protected area additions and apply to existing protected areas:
  - include consultation with tourism industry representatives during management planning processes in order to examine potential commercial opportunities within provincial parks and protected areas, subject to the primary goal of protecting conservation, recreation and cultural heritage values within protected areas;
  - assess commercial opportunities with regard to their compatibility with protected area management plans and, where appropriate, their contribution to the local economy and local employment;
  - work with local tourism operators and communities to ensure that information on recreation opportunities in protected areas is available and accurately described consistent with values in protected areas; and,
  - provide information to local communities on potential economic and employment opportunities associated with protected areas.
- Ensure consultation with First Nations as per Ministry of Water, Land and Air Protection consultation guidelines and the Agreement between BC Parks and the Tahltan Joint Councils.

12.1.2 Potential Commercial Recreation Opportunities

Below is a preliminary list of potential commercial recreation opportunities for Stikine Country Protected Areas. These activities may require specific impact assessments. Other commercial activities may be considered provided they are consistent with the general management direction and management objectives of the Stikine Country Protected Areas Management Plan.

- Increased non-motorized winter recreation using existing facilities.
- Day floatcraft trips from the Klappan River Bridge to the Stikine River Bridge and multi-day floatcraft trips on the Stikine and Spatsizi rivers.
- Commercial motorboat use on the Stikine River system upstream of Highway 37 Bridge for drop off and pick up purposes for multi-day trips and guide-outfitter support.

- Single day horse trips to the Stikine Canyon from the Telegraph Creek Road, and multi-day horse trips into backcountry areas.
- Canoe trips on the Kakiddi Lakes chain.
- Single or multi-day hiking, nature study or mountaineering trips.
- Backcountry trips of various sorts including skiing, hiking and canoeing.
- Up to three new angling guiding opportunities in the Stikine Country Protected Areas System.
- Cultural camps/interpretive sites run by First Nations.
- Walking/circle tours in frontcountry areas (Stikine River Bridge/Stikine River Canyon).
- An interpretive centre (possibly in a neighbouring community) developed with Environmental Stewardship Division, the Tahltan Band Council and Iskut First Nation, commercial operators and NGOs as potential partners.
- Orientation sessions for protected area visitors.
- Pending the establishment of maximum use levels or carrying capacity, the following maximum numbers of new or additional commercial opportunities will be considered above and beyond 2003 permitted levels:
  - up to 3 new angling guiding opportunities in line with current angling policy with a maximum of 300 rod days in total;
  - up to 4 winter recreation opportunities (ski touring, snowshoeing, dog sledding, mountaineering) with a maximum of 300 user days in total;
  - up to 6 floatcraft opportunities (rafting, canoeing) with a maximum of 700 user days in total;
  - up to 10 hiking/nature study opportunities with a maximum of 1000 user days in total;
  - up to 2 educational opportunities in Gladys Lake Ecological Reserve with a maximum of 200 user days in total (user day total excludes hiking or horse travel through the ecological reserve along existing named trails outlined in Appendix 12);
  - up to 3 horse tour opportunities with a maximum of 300 user days in total;
  - up to 3 additional floatplane and helicopter opportunities with a maximum of 40 return flights in total; and
  - up to 2 commercial recreational guiding opportunities (excluding hunting) in the Stikine Grand Canyon Management Area with a preference given to the Tahltan Nation employing qualified guides.

  These new or additional commercial opportunities will be in addition to those under permit at the time of plan approval and/or at the maximum historic level of existing commercial operators except for guided educational opportunities in Gladys Lake Ecological Reserve, which will have a total of 2.

12.2 Private Inholdings and Non-recreational Tenures

Stikine Country Protected Areas contain four inholdings, three in Spatsizi Plateau Wilderness Provincial Park and one in Stikine River Provincial Park. In Spatsizi Plateau Wilderness Provincial Park, two privately held lots at Hyland Post total 160 hectares, and one lot at Cold Fish Lake encompassing the Cold Fish Lake Camp covers 84 hectares. Nature Trust of British Columbia owns the lot at Cold Fish Lake. In Stikine River Provincial Park, one 10.9 hectare privately owned lot (Willie Williams) is located near the Stikine River Bridge. An additional 25.5 hectare parcel of Crown land adjacent to this private lot is not within the park.

Non-conforming uses include three communications transmitters, and a permanent residence at Mess Lake. Environmental Stewardship Division will terminate this latter use when the tenure holder no longer holds the tenure or relocates.

The western portion of the Stikine River Provincial Park contains portions of two grazing areas; the Mess Creek addition to Mount Edziza Provincial Park contains a portion of one grazing area; and the Klastline addition to Mount Edziza Provincial Park also contains a portion of one grazing area. The Ministry of Forests previously administered and monitored these areas under the *Range Act*. The Cassiar Iskut-Stikine LRMP states, "*existing grazing use will be allowed to continue*" (Cassiar Iskut-Stikine LRMP 2000).

12.2.1 General Management Direction

Overall Direction

Environmental Stewardship Division will work with private property owners to manage existing access to their properties located within Stikine Country Protected Areas. Non-conforming uses existing at the time of protected area establishment will be continued if appropriate and if they do not have unacceptable impacts on protected area values and are consistent with legislation establishing the protected areas. Non-conforming uses will be discontinued when no longer needed.

Objectives and Strategies

To recognize private inholdings within Stikine Country Protected Areas.

- Work with private property owners to maintain existing access to their private properties with minimal impact to natural and cultural heritage values.
- Consider purchasing private property located within Stikine Country Protected Areas if available for sale.

To minimize the number of non-conforming uses in Stikine Country Protected Areas.

- Re-evaluate the need for each communication transmitter at the time of permit renewal and remove transmitters when no longer required.
- Terminate the residential use at Mess Lake when the current tenure holder no longer holds the tenure or relocates, and consider removal of improvements and site cleanup.

To manage grazing uses within Stikine Country Protected Areas.

- Allow existing grazing use to continue as directed by the Cassiar Iskut-Stikine LRMP.
- Work with the Ministry of Forests to monitor and manage grazing uses within Stikine Country Protected Areas under Park Use Permit.

12.2.2 Commercial Filming Permits

Under the provisions of the *Park Act*, all commercial film productions taking place in a Class A park or *ELU Act* protected area must be authorized by a park use permit. Under the *Ecological Reserve Act* and the *Ecological Reserve Regulations*, commercial film production is not permitted except for films of a research or educational nature.

The BC Parks' policy on commercial filming allows commercial film productions within protected areas subject to the following:

- all commercial filming must be authorized under the *Park Act* or the *Ecological Reserve Act*;
- the Ministry reserves the right to approve or deny any requests for filming;
- filming in ecological reserves shall be restricted to films for research or educational purposes;
- the province is protected against potential liability arising from the commercial filming activity;
- as the public has the right to free and reasonable access to protected areas for their inspiration, use and enjoyment, only commercial filming with minimal public disruption will be considered;
- the protection and conservation of natural and cultural heritage, recreation use and appreciation values shall take precedence over any commercial filming activity;
- vehicles and aircraft may not be permitted in protected areas or portions thereof where access is closed to other park users because of safety or ecological considerations;
- all direct costs and expenses to the ministry resulting from commercial filming activity are recovered;
- the rights of pre-existing permittees are recognized; and,
- filming advertisements for a commercial product or service are prohibited when it results in or implies in any manner the ministry endorsement of the product or service.

12.2.2.1 General Management Direction

Overall Direction

Commercial filming will be permitted where it does not impact natural, cultural heritage, recreation use, spiritual and appreciation values and where it is consistent with the spirit and intent of the protected areas system and management direction provided in this management plan. Management of commercial filming activities in Stikine Country Protected Areas will follow BC Parks Commercial Filming Policy and Guidelines.

Objectives and Strategies

To permit commercial filming activities that do not impact on natural, cultural and recreation values and that provide benefits to local communities.

- Assess each commercial filming permit application individually for impacts on natural, cultural heritage, appreciation and recreation values.
- Encourage filming companies to purchase provisions and to hire from First Nations and other local communities and where appropriate, specify minimum employment opportunities to be offered to First Nations.
- Consider helicopter landings for filming where helicopter landings are permitted and if they have extremely low impacts and provide significant benefits to the protected areas system.

12.3 Funding Protected Area Operations

Managing natural, cultural heritage and recreational values in the Stikine Country Protected Areas is a challenging task. Part of the challenge is ensuring adequate funding for conducting management and monitoring activities. Because of the remote nature of the protected areas, even basic tasks such as trail maintenance and enforcement patrols are a costly undertaking. Managing the Stikine Country Protected Areas may require some innovative methods for securing funding.

12.3.1 General Management Direction

Overall Direction

Environmental Stewardship Division will consider a variety of options for funding and conducting protected area operations including partnerships with local communities, stakeholders, non-government organizations and the public.

Objectives and Strategies

To secure additional funds to support management activities in the Stikine Country Protected Areas.

- Consider a variety of options for funding protected area operations including but not limited to establishing a foundation for the management of the Stikine Country Protected Areas and establishing or increasing user fees.

To involve local communities, stakeholders, NGO's and the public in specific protected area management activities and planning.

- Investigate a range of partnerships with local communities, stakeholders, NGO's and the public such as:
  - commercial operators providing benefits to the protected areas system;
  - specific volunteer or stewardship projects (i.e. clean up of sites);
  - establishment of a "Friends of the Stikine Country Protected Areas" group;
  - operation of facilities at Cold Fish Lake; and,
  - trail maintenance.

13 Plan Implementation

13.1 Introduction

The Stikine Country Protected Areas Management Plan will guide protected area management over the next ten to twenty years. The plan provides long-term vision and strategic guidance for the management and stewardship of Stikine Country Protected Areas and sets out objectives and strategies for conservation, recreation, interpretation and operations.

13.2 Priorities

Stikine Country Protected Areas consist of approximately 1.4 million hectares of a primarily remote landscape. Information on many aspects of the system is limited and therefore some objectives and strategies address information gaps. Because of the number of protected areas, the size of the Stikine Country Protected Areas System, and the high natural and cultural heritage values, this plan advocates a significant number of management objectives and strategies. Implementation of these strategies is subject to funding and where possible, partnerships will be developed with First Nations, other agencies non-governmental organizations, stakeholders, the public and other interested parties to deliver some strategies.

The following section provides a preliminary list of short-term, long-term and ongoing and monitoring priorities from the Stikine Country Protected Areas Management Plan. Short-term priorities should be implemented within the first 5 - 7 years of plan approval and long-term priorities should be implemented within the first 10 - 15 years of plan approval. Ongoing priorities and monitoring should be conducted on an ongoing basis as needed.

The priority lists will be reviewed with the BC Parks/Tahltan Park Advisory Committee and the proposed Stikine Country Protected Areas Advisory Committee and refined as appropriate. The lists will be amended on an ongoing basis based as changing circumstances warrant (e.g. Proposals for use, emerging environmental pressures etc.).

13.2.1 Short-term priorities (1 - 7 years)

13.2.1.1 Inventory and assessment

- Assess the new areas added to the protected areas system (Mess, Klastline, Metsantan, Stikine River, Pitman, and Chukachida) for plants and plant communities at risk, and sensitive plants and plant communities.
- Inventory and assess already established facilities and trails for damage to native plants and plant communities.
- Assess the distribution and extent of non-native plants within Stikine Country Protected Areas and determine their impacts on natural vegetation features.
- Assess and verify reports of mountain pine beetle attack near Tatlatui Lake.
- Assess the extent and impacts of unauthorized camps (e.g. along the Stikine River downstream from the mouth of the Spatsizi River) and develop site plans as needed. If necessary, remove sites and designate formal camping areas.

- Assess horse impacts at guide-outfitter camps and develop strategies to reduce and prevent impacts in consultation with guide-outfitters.
- Map critical wildlife winter range areas and restrict access in these areas.
- Conduct surveys for potential wildlife species at risk.
- Update all large mammal population estimates for caribou, Stone's sheep, mountain goat and moose within five years as funding permits.
- Identify and establish waters that can be used as benchmarks for the study of native fish species that are unaffected by human disturbance, including angling.
- Determine existing angling guides and rod-day allocations within recently established protected areas and additions and accommodate existing tenures.
- Conduct a "Voluntary Angler Report" program for waters in the Stikine River drainage east of Highway 37, which includes distribution/drop boxes at Cold Fish Lake, Didene Portage, Tuaton or Laslui Lake, and the Highway 37 access point.
- Evaluate the potential of the Kakiddi Lakes chain as a canoe route.
- Evaluate areas of concentrated horse use (e.g. guide-outfitter camps) and develop strategies to minimize impacts of horse use if required.

13.2.1.2 Natural, Cultural and Outdoor Recreation Management

- Rehabilitate heavily used campsites along the Stikine River canoe route (e.g. Fountain Rapids).
- Discourage firewood collection at Fountain Rapids.
- Rehabilitate and improve the portage trail at Fountain Rapids to avoid unacceptable impacts on wet areas.
- Revise fire management plans to include additions and changes to protected areas, and to update and standardize fire management strategies to reflect vegetation management direction in this plan. Maintain Initial Attack zones for fire suppression in current fire management plans and establish Initial Attack zones for fire suppression around Metsantan village and on the north side of the Stikine River near the McBride River.
- Conduct a study using radio-collars for caribou in Mount Edziza Provincial Park to determine winter habitat use and important wintering areas.
- Conduct surveys of Stone's sheep in the Marion Wildlife Inventory Zone to determine effects of the burn on lamb recruitment and population numbers.
- Consider conducting a prescribed burn near Hyland Post, to fulfil management objectives of the original prescribed burn, subject to consultation with the Tahltan Nation and affected stakeholders.
- Consider conducting a full review of population levels and harvest rates for all species for both resident and guided hunts to ensure hunting levels are sustainable, conservation and First Nations considerations are met, and recreational hunting allocations are consistent with management objectives. This review will be conducted in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other stakeholders.
- Consider amending Wildlife Management Unit zone boundaries for these three zones by:
  - ➢ amending Management Unit 6-20A to include:
    - ⇨ the new Stikine River Provincial Park boundary east of Highway 37;
    - ⇨ the Metsantan addition to Spatsizi Plateau Wilderness Provincial Park; and,
    - ⇨ Chukachida Protected Area and Pitman River Protected Area.

  - ➢ amending Management Unit 6-21A to include:
    - ⇨ the Mess Creek and Klastline additions to Mount Edziza Provincial Park; and,
    - ⇨ Stikine River Provincial Park west of Highway 37.
- Develop funding partnerships with commercial operators to identify potential effects of new or expanded commercial recreation activities on wildlife and to monitor those effects.
- Investigate and implement angling regulations that conserve large-sized bull trout in the Stikine River system. Pay special attention to the fall spawning season when bull trout are especially vulnerable because of their aggressive nature and aggregating behaviour, and when riverboat travel is greatest because of hunting.
- Use the system for managing angling and angling guiding that will be developed to assign an appropriate lake classification and angling use levels for Buckley Lake.
- Work with the Tahltan Band Council and Iskut First Nation to develop a policy for the Metsantan Site with respect to protection and possible rehabilitation of the traditional village site.
- Provide a pullout on the Telegraph Creek Road for access to the proposed initial trail to the Grand Canyon of the Stikine River. Provide additional pullouts for additional trails as required.
- Consider a range of opportunities that would result in self-sustaining maintenance of the Cold Fish Camp facilities, which retain traditional and historic values and provide for continued public use. Opportunities may include:
  - ➢ increased user fees;
  - ➢ public/private sponsorship; and,
  - ➢ operation of the facilities by the Tahltan Nation, NGOs and/or other public groups or partnerships.

  Any proposals would be considered in conjunction with the Nature Trust, the Tahltan Nation and the proposed Stikine Country Protected Areas Advisory Committee.
- Pursue partnerships with other organizations and commercial operators (e.g. guide-outfitters, recreation guides) to assist with trail maintenance.
- Require non-commercial outdoor recreation users who handle and store fuel during their recreation activities to follow fuel handling and storage guidelines.
- Apply waste management guidelines to all commercial base camps.
- Place orientation information about the Stikine Country Protected Areas System at staging areas to reach visitors.
- Investigate a range of partnerships with local communities, stakeholders, NGOs and the public such as:
  - ➢ commercial operators providing benefits to the protected areas system;
  - ➢ specific volunteer or stewardship projects (e.g. clean up of sites);
  - ➢ establishment of a "Friends of the Stikine Country Protected Areas" group;
  - ➢ operation of facilities at Cold Fish Lake; and,
  - ➢ trail maintenance.
- Establish a Stikine Country Protected Areas Advisory Committee for an initial 3 year term (subject to renewal) to advise on specific aspects of implementation of the Stikine Country Protected Areas Management Plan. The committee will be advisory to the Regional Manager, Environmental Stewardship Division, voluntary (i.e. without remuneration) and will focus on specific implementation items assigned by the Regional

Manager, Environmental Stewardship Division. The committee will consist of representatives of Environmental Stewardship Division, First Nations, local communities, stakeholders and NGOs and will conduct 1 - 2 meetings per year with supporting teleconference calls, as required. Terms of Reference for the committee will be approved by the Regional Manager, Environmental Stewardship Division.

- In conjunction with First Nations and others, develop education and information materials to share with the public and protected area users on the nature, significance and fragility of cultural heritage values and ways to respect cultural heritage values.
- Investigate the possibility of developing a small visitor centre with other agencies, First Nations, commercial operators and NGOs as potential partners.
- Evaluate the need for a structured orientation session focussed on bear awareness and avoidance and backcountry etiquette intended for visitors to the Stikine Country Protected Areas System. Examine the most cost-effective locations and method for the delivery of such sessions.

13.2.1.3 Strategies and guidelines

- Establish management protocols/strategies for important aboriginal and non-aboriginal cultural heritage sites and trails (e.g. Caribou Hide village sites, Metsantan Village site, Cold Fish Lake Camp, Hyland Post Trail, Telegraph Trail, etc.). Determine the need for site or trail restoration. Develop and implement strategies to reduce or eliminate adverse impacts to cultural heritage sites in conjunction with First Nations and user groups.
- Develop a firewood management strategy that includes an assessment of supply and demand and strict guidelines on the removal of vegetation for supplying firewood.
- Work with First Nations to develop and implement a wildlife harvest monitoring program to evaluate current First Nations harvest levels in the Stikine Country Protected Areas System.
- Develop a strategy for managing wildlife hunting recreation activities that considers issues such as hunting zones, levels of harvest and consistency of regulations. This strategy will ensure that guide-outfitter quotas and LEH hunts are applied consistently between protected areas within each Greater Ecosystem and will be developed in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other stakeholders. Limited Entry Hunting and protected area guide-outfitter quotas are the preferred methods for managing hunting opportunities in Stikine Country Protected Areas.
- Establish a system of waters that includes a variety of recreational angling opportunities, such as limited daily catch quotas and catch and release only angling in consultation with angling guides, anglers and First Nations.
- Consider developing a system for managing angling and angling guiding that defines an angling zone for each water body or set of continuous waterbodies, classifies waterbodies (or angling zones) into angling experience categories, and assigns rod-days by angling category by protected area. Develop the system in consultation with angling guides, anglers and First Nations.
- Establish a working group consisting of government staff, First Nations, angling guides, anglers, and other stakeholders to develop specific guidelines for angling and angling guide management in Tatlatui Provincial Park. Consider defining an angling zone for

each waterbody or adjoining waterbodies, classifying waterbodies (or angling zones) into angling experience categories, and assigning rod-days by experience category.

- In consultation with the BC Floatplane Association (BCFA), BC Aviation Council, commercial operators, charter operators and other users, develop protocols/approaches to manage aircraft use to meet protected area management objectives. In the short term, approaches will recognize the existing regulation governing aircraft use, which requires prior approval for aircraft entering or leaving the protected areas system. In the long term, should regulations be amended, approaches will be modified to reflect the revised regulations.
- Encourage affected stakeholders to develop an acceptable strategy for dealing with current user issues (aircraft use/wilderness experience) on the Firesteel River.
- Work with the Tahltan Band Council and the Iskut First Nation to develop snowmobile use guidelines along the Klastline Trail in the Klastline Management Area.
- Develop fuel handling and storage guidelines for permitted commercial operators in Stikine Country Protected Areas in consultation with user groups. At a minimum guidelines should include direction on:
  - ➢ acceptable fuel storage containers and dispensing methods;
  - ➢ location of the fuel storage site;
  - ➢ management of empty storage containers;
  - ➢ management of full or partially full storage containers at the end of the season; and,
  - ➢ a spill kit requirement.
- Develop garbage disposal guidelines for non-commercial users.
- Review the waste management requirements for users of other rivers such as the Tatshenshini River and adapt those waste management requirements to the Stikine Country Protected Areas System if necessary.
- Consider a variety of options for funding protected area operations including but not limited to establishing a foundation for the management of the Stikine Country Protected Areas and establishing or increasing user fees.

13.2.1.4 Access

- Review bridge placement options over the Klastline River in consultation with the Tahltan Band Council and the Iskut First Nation and construct a bridge if funding is available.
- Investigate the potential for designating some trails or portions of some trails as horse-only or hiking-only trails and if necessary, develop new trails subject to the BC Parks Impact Assessment Process.
- Initially, develop one trail or route to the Grand Canyon of the Stikine River, subject to conducting an impact assessment following the BC Parks Impact Assessment Process to avoid unacceptable impacts on mountain goat populations, or on plants or plant communities at risk, from viewing activities and trails.
- Investigate developing an interpretive trail in a frontcountry area (e.g. Stikine River Bridge, Stikine River Provincial Park on the Telegraph Creek Road).
- Work with the Tahltan Band Council and the Iskut First Nation to protect Denkladia Mountain by considering limiting access to the area.
- Restrict access on Eve Cone to the designated trail.

- Maintain the ban on helicopter landings on the cinder cones and implement a ban on helicopter landings on calcite deposits, associated plant communities or other associated features at any hot springs.
- Close the Volcanic Plateau, Stikine Grand Canyon, Dawson/Tomias, Eaglenest/Plateau, Upper Stikine, Metsantan and Chapea management areas to helicopter landing, except for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Close Gladys Lake to aircraft landings, except for research and management purposes only.

13.2.2 Long-term priorities

- Develop appropriate action plans to deal with known historic impacts on water quality.
- Assess long-term climatic conditions to determine potential changes in natural disturbance patterns.
- Develop indicators and baseline measures for water quality monitoring.
- Develop a water quality monitoring strategy for water bodies with lower levels of use that considers outdoor recreation and commercial use levels.
- Develop a vegetation management plan that addresses current vegetation patterns, natural disturbance management and climate change.
- Protect the known localities of dry steppe plant communities at risk from human disturbance.
- Assess the current state of knowledge of vegetation features in Stikine Country Protected Areas and determine further information needs including information on species at risk.
- Identify and map known localities of plants and plant communities at risk, and sensitive plants and plant communities.
- Conduct further assessments of existing protected areas for plants and plant communities at risk and sensitive plants and plant communities.
- Assess the Mess Creek hot springs and other hot springs for location and extent of plants and plant communities at risk and sensitive plants and plant communities.
- Identify and map known localities of plants and dry steppe plant communities at risk along the Stikine River.
- If necessary, develop guidelines to reduce the current distribution and extent of non-native plant species, and/or to reduce potential future introductions.
- Delineate known ungulate winter and summer ranges based on research conducted by the Spatsizi Association of Biological Research on radio-collared animals, and on inventories.
- Conduct wildlife habitat capability and suitability mapping at 1:50,000 or 1:100,000 scale for protected areas in the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem for caribou, Stone's sheep, mountain goat, moose, grizzly bear and species at risk.
- Use the wildlife habitat map to determine overall wildlife habitat condition and to identify critical or sensitive habitat.
- Identify known areas of important habitat outside protected area boundaries.
- Delineate known caribou winter range and identify winter range characteristics based on existing information.

- Compile known locations of wildlife species at risk in the Stikine Country Protected Areas System.
- Determine habitat and life cycle requirements of wildlife species at risk known to occur in Stikine Country Protected Areas.
- Develop guidelines for minimizing disturbance to wildlife species at risk and their habitat.
- Develop guidelines for encounters between protected area visitors and wildlife to minimize disturbance and displacement of animals.
- Establish long-term vegetation monitoring plots at the recent Hyland Post burn to monitor wildlife habitat quality.
- Delineate Wildlife Inventory Zones for Stikine River Provincial Park, Chukachida Protected Area, Pitman River Protected Area and additions to Mount Edziza and Spatsizi Plateau Wilderness provincial parks.
- Conduct a caribou inventory during the fall rut to determine a population estimate for the Mount Edziza caribou population.
- Undertake basic amphibian inventories in the Stikine Country Protected Areas System.
- Confirm sightings of pikas and melanistic chipmunks in Tatlatui Provincial Park. Conduct ground investigations to determine extent and range of those species and develop guidelines to minimize disturbance to habitat and colonies.
- Work with First Nations to identify historical and currently used important habitats and migration routes.
- Identify and assess traditional habitat management activities.
- Investigate funding sources and partnerships for collecting baseline information on medium and small mammals, amphibians and invertebrates in the Stikine Country Protected Areas System.
- Develop a population monitoring strategy for wolves.
- Develop a monitoring strategy for wolverine and fisher for Stikine Country Protected Areas and monitor population status of those species.
- Identify aquatic habitats that are sensitive to jet boat use and implement restrictions if necessary.
- Conduct investigations to determine the population and reproductive status of the Buckley Lake rainbow trout population including:
  - ➢ field sampling of age class structure;
  - ➢ assessment of potential spawning streams; and,
  - ➢ interviews with First Nations elders.
- Conduct aquatic inventories for the Chukachida River and Pitman River to identify important bull trout habitat and to collect basic aquatic information.
- Consider implementing restrictive regulations for angling harvest of species at risk such as bull trout.
- Develop a system for monitoring angling pressure by non-guided anglers.
- Continue voluntary creel censuses with distribution and drop points at all registration and access locations. Cards should be coded prior to distribution to identify angler data by point of origin.
- Investigate and implement means of achieving higher participation rates for creel surveys.

- Implement a simple reporting program by angling guides of observed non-guided angling activities.
- Assess impacts of angling on the lake trout population in Cold Fish Lake and implement water-specific angling regulations if necessary.
- Investigate the degree of angler interest in Arctic grayling in the Stikine Country Protected Areas System and implement measures to conserve Arctic grayling populations if necessary.
- Encourage the study of all aspects of Stikine Country Protected Areas natural history by academic and scientific organizations, with special attention to the following priorities:
  - harvested fish and wildlife;
  - vegetation including species at risk;
  - non-harvested fish and wildlife;
  - terrestrial ecosystem inventories;
  - backcountry outdoor recreation use and activity and their effects on natural and cultural values; and,
  - cultural heritage.
- Encourage the study of cultural heritage and history of the protected areas that respects First Nations' concerns.
- Through consultation with First nations develop a summary of spiritual values for the Stikine Country and the British Columbia Protected Areas System.
- Work with First Nations to understand and define (if appropriate) their perspective about spiritual values in the Stikine Country Protected Areas System.
- Develop a management strategy to conserve spiritual values in the Stikine Country Protected Areas System.
- Collect more detailed information on outdoor recreation use levels and trends.
- Conduct site assessments to determine if campsite locations conflict with cultural heritage values.
- Work with First Nations, trapline holders and guide-outfitters to minimize the impacts of continued limited snowmachine access on natural, outdoor recreation and cultural heritage values.
- Work with commercial operators to minimize the use of motorboats on lakes in Stikine Country Protected Areas.
- Work with BC Rail to determine the safety conditions at the BCR railroad bridge and implement any required measures.
- Remove mention of the Gladys Lake cabin from all protected area brochures and the official Ministry of Water, Land and Air Protection web site to discourage outdoor recreation use.
- Review the need for maintenance of the Gladys Lake cabin for research purposes and assess the level of unauthorized recreation use of the cabin.
- Develop partnerships and promote sponsorships to enable visitor information to be delivered.
- Provide recreation users and commercial operators with information about:
  - the significance of geological features, their vulnerability to human disturbance and appropriate activities next to and within these areas:
  - the fragility of volcanic cones and specific direction about how to avoid damage to the cones;

  - the sensitivity of lichen and plant communities growing on volcanic cones;
  - the vulnerability of calcite deposits at Mess Creek and other hot springs to human disturbance and establish clearly marked trails to avoid damage to sensitive areas;
  - the vulnerability of plants and plant communities at Mess Creek hot springs;
  - the cultural importance of the obsidian deposits to the Tahltan Nation and stressing that the removal of obsidian for recreational or commercial use is prohibited under the *Park Act* and the *Park and Recreation Area Regulation*;
  - the significance and functioning of the two Stikine Country Protected Areas' predator-prey systems to visitors;
  - the significance of critical or sensitive habitat and impacts caused by human disturbance;
  - the significance of species at risk and their habitat and impacts caused by human disturbance;
  - the significance of wildlife habitat and impacts from disturbance, especially those habitats highly sensitive to disturbance;
  - how to avoid human/bear interactions;
  - river etiquette for operation of motorboats on rivers where floatcraft (i.e. canoe, kayak, inflatable raft) use also occurs (include information on river etiquette and safety while navigating through Jewel Rapids and Beggerlay Canyon);
  - no-trace camping techniques; and,
  - collecting firewood prior to arriving at Fountain Rapids (in the brochure; at the information shelter at Tuaton Lake; as part of an information package to be distributed by aircraft charter companies).
- Employ educational programs to increase visitor awareness of natural and cultural history, and bear avoidance, where feasible.
- Work with First Nations and users to develop strategies to reduce or eliminate damage where outdoor recreation use impinges on First Nations' traditional uses or cultural heritage sites.
- Develop protocol arrangements with First Nations on the sharing of cultural heritage inventories and other cultural information.
- Work with the Tahltan Band Council, the Iskut First Nation and the Ministry of Transportation to assess a possible pullout for viewing the Tahltan Eagle.
- Work with the Tahltan Band Council and Iskut First Nation to develop an interpretive package for the Tahltan Eagle.

13.2.3 Ongoing priorities and monitoring

- Review hunter harvests on an annual basis to ensure that they do not exceed annual allowable harvest levels.
- Identify and eliminate "noxious weeds" with low impact techniques such as removal by hand, and low intensity burns as required.
- Encourage visitors and commercial operators to avoid known high value winter habitat and birthing areas during those seasons. If necessary, close areas to human access to protect wildlife during sensitive seasons.
- Encourage visitors and commercial operators to avoid using known high value sensitive habitat. If necessary, close areas to human access to protect sensitive wildlife habitat.

- Encourage angler compliance with angling regulations by maintaining postings of provincial sport angling regulations at access points to the protected areas where angler reports are distributed and collected (especially Highway 37).
- Annually review the angling effort and harvest levels to ensure levels do not adversely influence conservation objectives.
- Monitor harvest levels and changes in population structure of trout in Buckley Lake.
- Continue to work with First Nations on issues pertaining to opportunities to take fish for ceremonial or sustenance purposes.
- Ensure that information on the Stikine Country Protected Areas System reflects the management direction given in this document and includes backcountry etiquette, safety concerns and protected area regulations.
- Provide promotional material that ensures visitors are aware and respectful of the wilderness, natural and cultural heritage values of the protected areas.
- Provide information to local communities about upcoming opportunities for employment and economic development and work with entrepreneurs to ensure that:
    - procedures and rules for accessing opportunities are readily available; and,
    - timing and scope of opportunities, to the extent practical, are consistent with local capacity.
- Add updated protected area boundaries to aeronautical charts. Also, add sensitive sites to aeronautical charts if necessary.
- Work with aviation organizations (BC Floatplane Association, BC Aviation Council, etc.) and commercial air charter companies to educate pilots on the effects of aircraft on wildlife.
- Remove facilities that are unsafe, no longer used or not required for emergency purposes and not of significant historic or cultural heritage value.
- Monitor water quality in the most heavily used areas (e.g. Cold Fish Lake, Stikine River at the bridge, Tuaton Lake, Fountain Rapids, Buckley Lake) and at permanent facilities, and implement strategies to offset, remediate or eliminate impacts from outdoor recreation or commercial activities if necessary.
- Monitor the demand for and use of firewood/heating fuel and restrict consumption if necessary.
- Continue to monitor the condition of campsites and trails and implement strategies to rehabilitate damaged areas and to avoid further impacts.
- Monitor natural disturbances and evaluate recent disturbances for wildlife habitat value and use.
- Conduct periodic monitoring for forest insect disturbances and, if consistent with management intent of the plan or to protect values outside the protected areas system, manage forest insects with fall and burn or prescribed fire.
- Conduct surveys of hunted populations of caribou, Stone's sheep, moose and mountain goats. Suggested time interval: every four to six years.
- Conduct surveys of unhunted populations of caribou, Stone's sheep, moose and mountain goats. Suggested time interval: every six to eight years.
- Establish and monitor long-term monitoring plots to investigate terrestrial lichen availability and dynamics in the caribou winter range along the Stikine River.
- Monitor the effects of natural disturbances on caribou winter habitat.
- Monitor trapping harvests specific to Stikine Country Protected Areas.

- Monitor hunter harvests for grizzly bear and trapping harvests for wolverine and fisher and revise or establish quotas if necessary.
- Develop a baseline monitoring program for amphibians that are found to occur in Stikine Country Protected Areas.
- Monitor outdoor recreation and commercial activities, including winter activities, and their impacts on wildlife during sensitive seasons and implement strategies to minimize disturbance if necessary.
- Monitor the rainbow trout only aquatic systems of Stikine Country Protected Areas.
- Monitor angling guide activity through annual reporting of client angling activity, catch and harvest on each waterbody for each guide and compile information annually.
- Monitor all angling guide activity in Tatlatui Provincial Park, including that occurring in months other than July and August, through annual reporting of client angling activity, catch and harvest.
- Monitor the number of flights, visitor experience quality and possible environmental impacts over time. In consultation with the BC Floatplane Association, the BC Aviation Council, commercial operators and private users, assess whether guidelines or site specific restrictions (e.g. number of commercial aircraft charter companies) are desirable. Implement management regime as necessary.
- Monitor aircraft use levels and visitor satisfaction to determine the need for use limits.
- Monitor the effects of aircraft on the mountain goats in the Stikine Canyon for possible impacts and develop and implement additional management strategies if necessary.
- Monitor river user experience and site impacts, and establish controls on river use, if needed, to maintain visitor satisfaction. Possible controls include numbers of groups, group size, trip timing, and number of trips/day.
- Monitor the effects of hiking use on the cinder cones.
- Conduct regular impact assessments on the Eaglenest, Icebox Canyon, Waterfall Creek and Paramount trails to ensure that hiking and horse use do not result in unacceptable impacts on Gladys Lake Ecological Reserve values. If necessary, close or relocate portions of trails to avoid further impacts while accommodating continued hiking and horse access to areas beyond the reserve.
- Monitor levels of use and visitor satisfaction to determine if use limits or other controls need to be implemented.
- Monitor the impacts of outdoor recreation activities and facilities on natural and cultural heritage values and implement measures to reduce unacceptable impacts if necessary.
- Conduct impact monitoring along the Kakiddi Lakes chain at the initial stages of canoe use of this route.
- Complete trail horse use impact surveys and monitor plants and plant communities at risk near trails.
- Monitor use levels and adjust levels of marketing and promotion to help maintain wilderness, natural and cultural heritage values.
- Work with the Ministry of Forests to monitor and manage grazing uses within Stikine Country Protected Areas under Park Use Permit. Monitor the effects of existing grazing activities on native plants and plant communities. Develop and implement a strategy to reduce those impacts if necessary.
- Manage access on volcanic cones and, if necessary, restrict access to designated trails or prohibit all outdoor recreation activities on cones.

- Manage access at the Mess Creek hot springs and other hot springs by providing designated trails while avoiding disturbance to plants and plant communities at risk and sensitive sites.
- Work with other agencies and commercial interests to minimize and mitigate impacts of current and potential commercial activities and associated access in adjacent areas on natural, cultural heritage and outdoor recreation values of the Stikine Country Protected Areas System.
- Work with other agencies and First Nations in vegetation management planning exercises on adjacent lands (i.e. landscape unit planning) within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem to promote compatibility of vegetation management objectives with those for Stikine Country Protected Areas, while respecting management regimes outside the protected areas system.
- Work with the Ministry of Forests to establish habitat management objectives for areas adjacent to the protected areas that are known to be used by protected area wildlife.
- Work with First Nations, other agencies and the public to minimize and mitigate impacts of activities outside protected areas on the large mammal predator-prey system centred in protected areas within the Mount Edziza Greater Ecosystem and Spatsizi Greater Ecosystem.
- Ensure protected area objectives are considered in hunting and trapping regulations in areas adjacent to Stikine Country Protected Areas System within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem.
- Cooperate with other agencies, First Nations and resource industries to maintain regional connectivity for wide ranging large mammal species.
- Work with other agencies to follow Cassiar Iskut-Stikine LRMP management direction for water quality.
- Work with other agencies and First Nations to ensure that Environmental Stewardship Division is fully involved with any decisions regarding road building on adjacent lands that may affect Stikine Country Protected Areas.
- Work with and explore partnerships with the Iskut First Nation, other agencies, commercial operators and NGOs in managing access along the BCR railroad grade.
- Work with other agencies and First Nations to manage access to mineral tenures adjacent to the Metsantan area.
- Work with Ministry of Transportation to maintain access to the Stikine River at the Highway 37 Bridge.
- Work with other agencies and First Nations by participating in the planning and management of access on the Omineca Mine Road, to minimize and mitigate impacts of that access on Tatlatui Provincial Park.
- Consult with Tahltan and Kaska-Dene First Nations on any activities that have potential to infringe on existing aboriginal or treaty rights.
- Continue to support and implement the Tahltan/BC Parks Agreement that provides for a joint Protected Areas Committee.
- Work with First Nations to develop and share cultural heritage inventories and assess the significance of cultural heritage sites and potential for damage from public and commercial recreation.

- Work with First Nations to facilitate the exercise of existing aboriginal rights and development of programs/initiatives to introduce First Nations youth to the Stikine Country Protected Areas System.
- Host periodic open houses/meetings and information sessions in local communities and regional and provincial centres that increase knowledge and communication while providing an opportunity to resolve identified issues.
- Ensure that updates to strategic planning for Stikine Country Protected Areas are available to the public.
- Provide information to local communities about upcoming opportunities for employment and economic development and work with entrepreneurs to ensure that: a) procedures and rules for gaining access to opportunities are readily available; and b) timing and scope of opportunities, to the extent practical, are consistent with local capacity.
- Meet periodically with commercial operators to review operations and issues related to those operations.

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15 Glossary

Aboriginal rights: Rights of First Nations as defined by the courts or treaty settlements.

Adaptive management: Refers to the systematic process for continually improving management policies and practices by learning from the outcomes of an operational program.

Arboreal lichens: Refers to lichens that grow on trees.

At risk: Refers to taxa that are vulnerable, threatened or endangered.

Blue List: List of vulnerable taxa that are candidates for the Red List in the foreseeable future and/or are generally suspected to be vulnerable due to limited information.

Capability (of habitat): What a given habitat is capable of supporting with manipulation of the seral stages, assuming management for maximization; capability under ideal conditions.

Committee on the Status of Endangered Wildlife in Canada (COSEWIC): A body of government, non-government and academic experts who assess species at risk nationally.

Ecosystem: Refers to all living and non-living components of an environment and the processes that link them in time and space.

Endangered: Refers to a species facing imminent extinction or extirpation (COSEWIC definition).

Extinct: Refers to a species that no longer exists (COSEWIC definition).

Extirpated: Refers to a species that no longer exists in the wild in Canada, but occurs elsewhere (COSEWIC definition).

Facilities: Include all structures, trails and routes.

Historical use: Refers to past use by non-aboriginal people.

Precautionary Principle: This principle states that all stakeholders have a responsibility to take precautionary measures to anticipate, prevent or minimize adverse effects to the environment. The lack of full scientific certainty as to impacts should not be an adequate reason to postpone measures that will protect the resource (Akcakaya et al. 1997).

Red List: List of taxa that are designated as Threatened or Endangered under the *Wildlife Act*, are candidates for this designation, or are extirpated but were once part of the natural fauna of BC.

Rustic backcountry shelters: Refers to small cabins or tent frames but not to a significant lodge development

Special Concern (formerly "vulnerable"): Refers to a species that is of special concern because of characteristics that make it particularly sensitive to human activities or natural events (COSEWIC definition).

Structures: Include shelters (cabins, tent frames), sheds, and any other constructed item other than trail improvements.

Terrestrial lichens: Refers to lichens that grow on the ground.

Threatened: Refers to a species likely to become endangered if limiting factors are not reversed (COSEWIC definition).

Traditional use: Refers to use or activities by First Nations that have occurred over time. Some, but not all, traditional activities or uses may be established as aboriginal rights.

Trails: Include bridges and boardwalks and any other similar trail improvements.

Vulnerable: Refers to a species that is particularly sensitive to human activities and natural events.

16 Appendix 1. Cassiar Iskut-Stikine LRMP - General and Specific Management Direction for New Protected Areas

Cassiar Iskut-Stikine LRMP - General Management Direction for protected areas

Goals/ Desired Future State

- ❒ A protected area system for the LRMP area that has viable, representative examples of the natural diversity of the LRMP area including terrestrial and aquatic ecosystems, characteristic habitats, hydrology, landforms, and characteristic backcountry recreational and cultural heritage values of each ecosection.
- ❒ A protected areas system for the LRMP area that has special natural, cultural heritage and recreational features including rare and endangered species and critical habitats, outstanding or unique botanical, zoological, geological, and paleontological features, outstanding or fragile cultural heritage features, and outstanding outdoor recreational features such as trails
- ❒ Protected areas in the Cassiar Iskut-Stikine that are a major contributor to the local economy and local employment

Table 1. Cassiar Iskut-Stikine LRMP General Management Direction for Protected Areas

Objectives	Strategies
1. Ensure the maintenance of the conservation, recreation and cultural heritage values within protected areas. This includes developing comprehensive park management plans in a timely manner.	1.1 Develop comprehensive management plans for each approved protected area in a timely manner and with respect to the priority resource values at risk. 1.2 Develop management plans with the benefit of extensive public, First Nations and inter-agency participation and incorporate direction and consider advice from the approved LRMP. 1.3 Develop plans that, among other things, define park-specific management objectives, acceptable uses, acceptable levels of use, zoning, and other strategies to minimize conflicts and help ensure the integrity of important protected area values. 1.4 Include consultation with tourism industry representatives during management planning processes in order to examine potential commercial opportunities within provincial parks, subject to the primary goal of protecting conservation, recreation and cultural heritage values within protected areas. 1.5 Assess commercial opportunities with regard to their compatibility with protected area management plans and, where appropriate, their contribution to the local economy and local employment. Generally, physical commercial infrastructure (e.g., roads, lodgings, staging areas, etc.) will be directed outside of protected area boundaries in order to minimize impacts within protected areas. 1.6 Pending the development of comprehensive management plans for each protected area, develop management direction statements in a timely manner to direct management and operations. Management direction statements will involve consultation with stakeholders, LRMP participants and First Nations.
2. Recognize and accommodate traditional uses and aboriginal rights of First Nations in protected areas.	2.1 Develop government-to-government relationships between BC Parks and First Nations concerning management of protected areas. 2.2 Establish communication protocols between BC Parks and First Nations with respect to proposed and existing protected areas.
3. Recognize the legal rights of existing tenure holders and landowners within newly established parks and deal fairly with those interests	3.1 Existing mineral and timber tenures and other tenures/encumbrances associated with commodity extraction will be discontinued within new protected areas. The terms of discontinuance will be negotiated in a timely manner with owners of existing tenure interests, in accordance with provincial policy respecting resource rights compensation. Existing non-tenured uses (commercial and private) may be continued subject to compatibility with management objectives and values for individual

Table 1. Cassiar Iskut-Stikine LRMP General Management Direction for Protected Areas

Objectives	Strategies
	protected areas. 3.2 Existing tenures within new protected areas for utility rights-of-way, communication sites, grazing, commercial backcountry recreation, guide-outfitting, trapping, water works and use, and other tenures not based in commodity extraction, will be allowed to continue, in accordance with the existing management conditions attached to those tenures. In the future, the management conditions attached to those tenures may be amended to comply with the requirements of BC Parks policy and management plans developed for individual protected areas. 3.3 Consistent with tenure document provisions and current assignments/transfer procedures, holders of existing tenures of the type identified in strategy 3.2 above may assign/transfer their tenures to different parties. However, where existing tenures lapse or are voluntarily surrendered by a tenure holder, the province is under no obligation to re-issue the tenure rights. 3.4 Further to 3.2 and 3.3 above, trapping will continue as an authorized, use in protected areas. Extinguishment of tenure will occur on a voluntary basis only, through purchase by BC Parks at fair market value. 3.5 Further to 3.2 and 3.3 above, existing range tenures that are within protected areas will continue to be administered and managed in accordance with the *Range Act*, as per the transitional provisions for new parks in the *Park Amendment Act*, 1997. 3.6 Alterations to conditions of tenure will be based on sound resource management principles with respect to the activity in question (e.g., sustainability of trapping, guiding, grazing activities) and/or avoidance of impacts to the resource values for which the protected area was established (e.g., caribou, biodiversity, recreation etc.). Alterations will be made in consultation with the tenure holder. Where alterations to conditions of tenure act, in practical terms, to extinguish tenure, it is recommended that the tenure holder be fairly compensated. 3.7 Existing owners of private land and First Nations will continue to exercise their rights. Where private land is surrounded by a new park and the only access is through the protected area, rights to existing access to those properties will continue.
4. Maintain ecosystem representation and integrity, and ensure protection of key resource values and natural features.	4.1 Within protected areas, management emphasis will be placed on maintaining the ecosystems, resource values and natural features for which protected areas were established. 4.2 Management interventions will not significantly alter natural ecological, hydrological and geomorphic processes except for express management purposes as defined by a protected area management plan. 4.3 Where existing grazing tenures occur, sensitive plant communities (i.e., steep south facing slopes) will be maintained in conjunction with Ministry of Forests through application of range management guidelines. 4.4 Assemble resource inventories for new park areas as budgets permit 4.5 Vegetation management may be undertaken, where appropriate, (e.g., burning to enhance wildlife forage). 4.6 Monitor visitor use and manage so that levels of use do not exceed carrying capacity (i.e., overuse is avoided) 4.7 Encourage use of low impact outdoor techniques in protected areas.
5. Protect key species and their habitats.	5.1 Permit opportunities to establish benchmarks for scientific study and management of rare, endangered and at risk species. 5.2 Within protected areas, manage rare, endangered and at risk species and their habitats as priority resource values. 5.3 Maintain functional habitat, cover and site-specific features for fish and wildlife species. 5.4 Encourage human use patterns that minimize impact on the environment (e.g. trails, boardwalks, facilities)
6. Coordinate strategic planning and management between protected areas and the adjacent landbase	6.1 Manage natural occurrences (e.g., fires, insects, and forest disease) within park boundaries relative to their impact on the ecosystem within the boundaries of the protected area, and on the broader ecosystem values of which the protected area is a part.

Table 1. Cassiar Iskut-Stikine LRMP General Management Direction for Protected Areas	
Objectives	**Strategies**
	6.2 Coordinate planning of resources and resource development activities on land adjacent to and within protected areas (e.g., mountain pine beetle management, management for wildlife, recreation, visual quality and fire, and access management adjacent to sensitive features within a park).
7. Provide a range of recreation opportunities from primitive to intensive recreation use, compatible with the values being protected.	7.1 Plan for a range of recreation experiences compatible with the general wilderness quality of the region, in order to compliment recreation elsewhere in the plan area. 7.2 Where appropriate, close or reclaim existing access and trails within protected areas to support primitive recreation experiences. Similarly development of trails and facilities and recreational access to some areas may be managed or limited to maintain the quality of the recreational experience and protected area values. 7.3 Limit development of trails and facilities in wilderness protected areas to maintain primitive recreation values 7.4 Levels of recreational use and associated impacts will be monitored and management applied, where necessary, to maintain the backcountry qualities of an area. 7.5 Provide recreational opportunities accessible to local residents, subject to the carrying capacity of individual protected areas and the values being protected 7.6 Develop and maintain facilities and trails to support tourism and local resident use in frontcountry protected areas zoned for intensive recreation consistent with values being protected
8. Plan and manage protected areas in a manner that protects cultural heritage values	8.1 Identify and protect archaeological sites, special sites, traditional use, and heritage trails (First Nations and pioneer)
9. Recognize hunting as an acceptable use within protected areas.	9.1 Continue to provide hunting opportunities for First Nations, local and resident hunters, and guide outfitters in protected areas, except where there are the following overriding considerations: •Public safety; and •Conservation priorities 9.2 Develop hunting regulations in cooperation with B.C. Environment, Fish and Wildlife Branch. Detailed guidelines for hunting will be developed in consultation with guide outfitters and local and resident hunter groups. 9.3 Base any future changes to allocable harvests on up-to-date professional and scientific information on the status of wildlife populations. 9.4 Address allocation of harvest among First Nations, local and resident hunters, and guide outfitters, when changing hunting regulations within new protected areas.
10. Where opportunities are identified in a protected area management plan and are consistent with the objectives for which the protected area is managed, facilitate increased local business development and employment associated with protected areas	10.1 Include local employment and business creation as criteria for awarding commercial park use permits 10.2 Work with local tourism operators and communities to ensure that information on recreation opportunities in protected areas is available and accurately described consistent with values in protected areas. 10.3 Provide information to local communities on potential economic and employment opportunities associated with protected areas.

Table 2. Cassiar Iskut-Stikine LRMP recommended management direction for new protected areas in the Stikine Country Protected Areas System.

	Items to be addressed in the protected area management plan	
Protected Area	**Values to be protected**	**Management Direction**
Klastline	To increase the viability of the predator prey ecosystem associated with adjacent Mount Edziza Provincial Park and the protected area along the Stikine River. Specific features include: • One of the most northern winter ranges for mule deer • South facing grassy aspen slopes • Representative ecosystems of the spruce-willow birch zone • High habitat values for mountain goat • Recreational and cultural heritage values associated with Klastline Trail	• Hunting will continue as per Objective 9, Section 2.5.1: GMD for protected areas • Permit non-motorized use only on Klastline Trail from spring thaw to fall freeze-up. • Snowmobile use is allowed along the Klastline Trail • Maintain opportunities for construction of cabins, as required, to support recreational use along the Klastline Trail.
Mess Creek	To protect high value low elevation habitat and ecosystems adjacent to Mount Edziza Provincial Park and large mineral springs with extensive tufa deposits and associated wetlands, including: • Rare plant species associated with tufa deposits and wetlands • Mineral licks • High value wildlife habitat for goat, moose, grizzly along valley, including a major movement corridor and key winter range	• Hunting will continue as per Objective 9, Section 2.5.1: GMD for protected areas • Provide designated trails to minimize impacts to calcite deposits. • Accommodate existing trapping use consistent with protected area values.
Stikine Grand Canyon	To recognize and protect the Grand Canyon of the Stikine as an exceptional natural landform, including • Uncommon dry steppe ecosystems • A unique population of canyon mountain goats.	• Allow a range of front-country to backcountry viewing opportunities along the Grand Canyon of the Stikine. • Locate trails to viewing areas to minimize potential for disturbance of mountain goats. • Allow opportunities for frontcountry tourism development in the vicinity of the Stikine bridge on Highway 37. • The protected area will exclude the right-of-way to either side of existing highways (Highway 37 and the Telegraph Creek Road) and gravel sources required for maintenance and upgrading activities. • Identify existing private commercial uses that may be untenured and seek to accommodate those uses consistent with protected areas values and the protected area management plan e.g. the existing trail riding operation. • Continue to allow existing access to private or leased land • Existing grazing use will be allowed to continue • Hunting will continue as per Objective 9, Section 2.5.1: GMD for protected areas
Upper Stikine Spatsizi Extension	To protect the Spatsizi predator-prey system and the upper reaches of the Stikine River, including: • Important low elevation habitat in Stikine River valley and tributary valleys • Highly significant caribou winter habitat at Mount Brock, in forested	• Consider important archaeological sites, cultural / heritage values, and activities of First Nations in protected areas planning • Allow opportunities for construction of backcountry cabins as required to support recreational use, compatible with protected area values. • Continue to allow motorized boat use for recreation and hunting along the Stikine, Chukachida, and Pitman Rivers, consistent with acceptable types and levels of use

Table 2. Cassiar Iskut-Stikine LRMP recommended management direction for new protected areas in the Stikine Country Protected Areas System.

	Items to be addressed in the protected area management plan	
Protected Area	**Values to be protected**	**Management Direction**
	areas north of Stikine River and year-round caribou habitat, including major rutting areas at Mt Edozadelly • High value moose habitat and calving grounds, particularly at Pitman River, Chukachida River and Geese Creek. • High value sheep habitat, particularly the enhancement area at Beggarly Mountain • Key wildlife movement corridors along Pitman and Chukachida Rivers, providing connectivity to high value habitat in the Mackenzie LRMP • High cultural heritage values for the Tahltan, including very high values at Caribou Hide and Metsantan Village e.g., grave sites, archaeological sites, and remnant buildings. Potential use for summer elder trips, youth camps and other traditional activities • Internationally recognized river recreation • Other wilderness recreation opportunities (hunting, fishing, backpacking)	acceptable types and levels of use • Hunting will continue as per Objective 9, Section 2.5.1: GMD for protected areas **For Pitman River:** • In the event that a request is made for access and where reasonable review determines that no practicable alternative exists outside of the protected area, then a decision regarding the most appropriate access will be made by Government authorities. The decision will be made in full consideration of the functional integrity of the protected area and the need for access for mineral activities, in accordance with applicable review and approval processes. • If a road is required, locate it to minimize environmental and wildlife impacts, including providing access controls if required. Permanently deactivate the road upon completion of operations. • Do not create a circle route as a result of providing access across this protected area. • The Pitman River has highly unstable terrain. If a road is required, recommend full bonding for road construction in recognition of the higher environmental risk. • In keeping with the LRMP Economic Strategy, it is preferred that any mining roads north of the Pitman connect with northern routes (e.g., the Jade Road), to allow economic benefits to accrue to the local area. **For Chukachida River and Geese Creek:** • In the event that a request is made for access and where reasonable review determines that no practicable alternative exists outside of the protected area, then a decision regarding the most appropriate access will be made by Government authorities. The decision will be made in full consideration of the functional integrity of the protected area and the need for access for mineral activities, in accordance with applicable review and approval processes. • If a road is required, locate it to minimize environmental and wildlife impacts, including providing access controls if required. Permanently deactivate the road upon completion of operations. • Do not create a circle route as a result of providing access across this protected area. • The Chukachida area includes one mineral tenure that will be addressed as per Section 2.5.1, Strategy 3.1: GMD for protected areas. **For Metsantan:** • Existing mineral tenure areas (Map 15) will be excluded from the Metsantan protected area and will be available for staking, mineral exploration, and mine development for a period of 20 years from the date of LRMP approval. At the end of 20 years, if there are no mineral tenures in place, these areas will be added to the protected area. If there are tenures in place 20 years from plan approval, the tenure areas will be added to the protected area once tenures lapse. • To the extent compatible with mine development, maintain the long-term ecological integrity and cultural values of the excluded Metsantan tenure areas in consideration of their eventual protected area status. • Manage access into mineral tenures adjacent to the protected area to minimize disturbance of seasonal migration of caribou.

17 Appendix 2. Cassiar Iskut-Stikine LRMP recommended management direction for the Mount Edziza Resource Management Zone.

Cassiar Iskut-Stikine LRMP recommended management direction for the Mount Edziza Resource Management Zone.

This area was formerly the Mount Edziza Recreation Area. The area is surrounded on three sides by Mount Edziza Provincial Park and includes the Spectrum property, a developed gold-copper prospect. The intent of this zone is to promote a cooperative approach to managing mineral exploration, development and reclamation adjacent to a park. While mineral development is currently allowed in this zone, the intent in the long term is for the area to become part of Mount Edziza Provincial Park. To this end, any development in this zone should be undertaken in consideration of its eventual park status.

Objective: To cooperatively manage mineral exploration, development and reclamation while:

⇒ maintaining the ecological integrity and backcountry character of the adjacent Mount Edziza Provincial Park; and,

⇒ to the extent compatible with mine development, maintaining the long-term ecological integrity and backcountry character of the Mount Edziza zone.

Commercial forest harvesting will continue to not be allowed within this zone.

Management Category	Strategies
Biodiversity	• Avoid disturbance of red- and blue-listed plants and plant communities when locating roads and mine infrastructure.
Wildlife	• Avoid disruption of the mineral lick along Tennaya Creek • Locate roads and mine infrastructure to minimize disruption of wildlife, in particular mountain goats during kidding season and the use of spring and summer range by mountain ungulates.
Aquatic Ecosystems and Riparian Habitat	• Maintain water quality and fisheries values, including within the Nutlude Lake chain and its tributaries, as per GMD[1].
Hunting, Trapping, Guide-outfitting, Fishing	• As per GMD
Recreation/Tourism	• Minimize potential to damage or destroy unique volcanic features e.g., (Pipe Organ Rock) during blasting.
Visual quality	• As per GMD. • Where road access is required, plan road layout to minimize visual impacts from Nuttlude Lake (e.g., using forest screening).
Access Management	• Manage public use of any new access cooperatively between BC Parks and the responsible agencies in consideration of the park management plan for Mount Edziza Provincial Park • Recommend that permits for a road through Mount Edziza Provincial Park be issued in a timely manner in the event of mine development being approved in the Mount Edziza Resource Management Zone. For advanced mineral exploration e.g., bulk sampling, consider allowing road access through Mount Edziza Provincial Park where reasonable review determines that no practicable alternative exists. Any decision to put a road through the park should be accompanied by an appropriate public review process. (See Appendix 5: Policy Recommendations)
Mineral and Energy Resources	• This zone will be available for staking, mineral exploration, and mine development for a period of 20 years from the date of LRMP approval. At the end of 20 years, if there are no mineral tenures in place, the zone will be added to Mount Edziza Provincial Park. If there are tenures in place 20 years from plan approval, the zone will be added to the park once tenures lapse. • To the extent possible, fully reclaim all land disturbed by mineral exploration and mine development.
Timber	• Commercial timber harvesting is not allowed in this zone. • Minimize the harvesting of timber during mine development e.g., only harvest timber where necessary to clear mine sites and access roads. Timber required for mine construction should be harvested from outside the zone.

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[1] GMD = Cassiar Iskut-Stikine LRMP General Management Direction for the whole LRMP area

18 Appendix 3. Vegetation characteristics of Stikine Country Protected Areas

Appendix 3. Table 1. Ecoregion and Biogeoclimatic Subzone/variant Representation within Stikine Country Protected Areas[1].

Biogeoclimatic Subzone/ Variant[2]	Mount Edziza Provincial Park and proposed Protected Area	Mount Edziza RMZ[3]	Stikine River Provincial Park	Pitman River Protected Area	Chukachida Protected Area	Spatsizi Plateau Wilderness Provincial Park	Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Southern Boreal Plateau								
SBS	19839	620						
ESSFwv	34339	2149						
BWBSdk1	7431		87432	4771		49112		
SWB	39382		104107	1486		341973	12202	48372
AT	86546	664	5155	60		314226	30230	53138
Total	187537	3433	196694	6317		705311	42432	101510
Stikine Plateau								
BWBSdk1	54071		43852					
SWB	6216		7742					
AT			588					
Total	60287		52182					
Tahltan Highland								
SBS								
ESSFwv	15009							
BWBSdk1								
AT	829							
Total	15838							
Northern Skeena Mountains								
ESSFwv	943							
AT	2386							
Total	3329							
Eastern Skeena Mountains								
ESSFmc								50
AT								1886
Total								1936
Cassiar Ranges								
BWBSdk1			3136	2150	986			
SWB			1953	7671	17420			
AT			2	173	995	170		
Total			5091	9964	19401	170		

[1] Information on ecosection representation in the Stikine Country Protected Areas System was compiled for the Stikine Country Protected Areas Technical Background Information Summary that was completed in 2000. Ecosection representation information in this management plan includes new protected area boundaries but does not include recent updates to the ecosection map.

[2] AT = Alpine Tundra zone (undifferentiated)
BWBSdk1 = Boreal White and Black Spruce zone – Stikine variant of the dry cool subzone
ESSFmc = Engelmann Spruce-Subalpine Fir zone – moist cold subzone
ESSFwv = Engelmann Spruce-Subalpine Fir zone – wet, very cold subzone
SBS = Sub-Boreal Spruce zone (undifferentiated)
SWB = Spruce-Willow-Birch zone (undifferentiated)

[3] Mount Edziza RMZ = Mount Edziza Resource Management Zone

Appendix 3. Table 2. Known Occurrences of Plant Species at Risk within Stikine Country Protected Areas. (Pojar 1976, 2000, CDC plant lists).

Scientific name	Common name	Provincial list	Mount Edziza Provincial Park, proposed Protected Area and RMZ[1]	Spatsizi Plateau Wilderness Provincial Park	Gladys Lake Ecological Reserve	Tatlatui Provincial Park	Habitat	BGC[2] Zone
Douglasia gormanii[3]	Gorman's douglasia	Blue		+	+		Rocky slopes in the alpine zone	AT
Draba cinerea	Gray-leaved draba	Blue			+		Dry meadows and cliffs in the montane to alpine zones	AT BWBS SWB
Draba corymbosa	Baffin's bay draba	Blue	+				Mesic to dry meadows in the alpine zone	AT
Draba fladnizensis	Austrian whitlow-grass	Blue	+	+	+		Mesic to dry meadows, cliffs and talus in the montane to alpine zone	AT BWBS SWB
Draba lactea	Milky draba	Blue	+		+		Mesic to dry meadows and cliffs in the montane to alpine zones	AT BWBS SWB
Draba lonchocarpa var thompsonii	Lance-fruited whitlow-grass	Blue			+		Mesic to dry meadows, cliffs and scree slopes in the alpine zone	AT
Draba stenopetala[4]	Star-flowered draba	Red	+				Mesic to dry meadows and cliffs in the subalpine and alpine zones	AT
Epilobium davuricum	Swamp willowherb	Blue			+		Wet meadows and cliffs in the subalpine and alpine zones	AT SWB
Epilobium leptocarpum	Small-flowered willowherb	Blue	+				Moist meadows and stream banks in the montane to alpine zones	AT ESSF
Erigeron uniflorus var eriocephalus[5]	Northern daisy	Blue			+		Moist to wet meadows in the alpine zone	AT
Eriophorum vaginatum spp Spissum	Sheathed cotton-grass	Blue		+			Bogs, marshes and wet meadows in the montane to subalpine zones	BWBS SBS
Erysimum pallasii[6]	Pallas' wallflower	Blue	+				Dry talus slopes in the alpine zone	AT
Eutrema edwardsii	Edward's wallflower	Blue	+		+		Dry talus slopes in the subalpine and alpine zones	AT SWB
Festuca minutiflora	Little fescue	Blue	+				Dry, stony slopes in the alpine zone	AT
Juncus arcticus var alaskanus	Arctic rush	Blue			+		Tidal flats and lake margins in the lowland and montane zones	AT BWBS ESSF
Koenigia islandica	Iceland Koenigia	Blue	+		+		Moist gravelly sites in the subalpine and alpine zones	AT SWB
Lupinus kuschei	Yukon lupine	Blue	+				Mesic, rocky, sandy or gravelly sites in the montane zone	BWBS
Luzula arctica	Arctic wood-rush	Blue	+		+		Moist meadows and snow bed sites in the subalpine and alpine zones	AT SWB
Luzula groenlandica[3]	Greenland wood-rush	Blue			+		Wet depressions and snow bed sites in the alpine zone	AT
Papaver alboroseum	Pale poppy	Blue				+	Mesic to dry sites in the alpine zone	AT
Ranunculus sulphureus	Sulphur buttercup	Blue		+	+		Moist meadows, bogs or gravelly sites in the alpine zone	AT
Salix raupii	Raup's willow	Red			+		Thickets in moist, open forests and on gravel floodplains in the montane zone	BWBS
Saxifraga nelsoniana spp Carlottae	Cordate-leaved saxifrage	Red	+				Moist rocks, ledges and stream banks from the montane to alpine zones	AT SWB
Saxifraga serpyllifolia	Thyme-leaved saxifrage	Blue	+		+		Moist gravelly scree slopes in the alpine zone	AT
Senecio sheldonensis	Mount Sheldon buttercup	Blue			+		Wet to moist sites in the montane to alpine zones	AT SWB

[1] Mount Edziza RMZ = Mount Edziza Resource Management Zone

[2] Biogeoclimatic Zones that plants are found in Stikine Country Protected Areas. AT=Alpine Tundra. BWBS=Boreal White and Black Spruce. ESSF=Engelmann Spruce-Subalpine Fir. SWB=Spruce-Willow-Birch

[3] In B.C., known only from Spatsizi Plateau

[4] In B.C., known only from Mount Edziza and Tatshenshini areas

[5] In B.C., known only from Cold Fish Lake and Tatshenshini areas

[6] In B.C., known only from Mount Edziza

Appendix 3. Table 3. Plant species of taxonomic or distributional interest found in Gladys Lake Ecological Reserve. (Pojar 1986, 2000).

Arabis lemmonii	*Ledum palustre ssp. decumbens*
Arnica lessingii	*Lupinus nootkatensis*
Artemisia michauxiana	*Luzula confusa*
Carex obtusata	*Minuartia dawsonensis*
Carex supina	*Oxytropis campestris var. jordalii*
Castilleja parviflora	*Oxytropis huddelsonii*
Cirsium edule	*Poa interior*
Draba alpina	*Poa rupicola*
Dryopteris fragrans	*Polygonum douglasii*
Epilobium luteum	*Ranunculus grayi*
Erigeron purpuratus	*Sedum divergens*
Fritillaria camschatcensis	*Selaginella sibrica*
Juncus biglumis	

Appendix 3. Table 4. Known Occurrences of Rare Vegetation Ecosystems within Stikine Country Protected Areas. (Pojar in prep).

Rare Ecosystem	Site type	Mount Edziza Provincial Park, proposed Protected Area and RMZ[1]	Stikine River Provincial Park	Spatsizi Plateau Wilderness Provincial Park	Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Boreal White and Black Spruce – boreal steppe on steep south and southwest facing slopes						
Artemesia frigida – Elymus spp.	Boreal steppe	Klastline[2] Stikine River slopes Lower Mess Creek	Stikine River			
Juniperus x – Elymus trachycaulus – Artemisia (campestris frigida)	Warm and dry steep, south facing slopes	Klastline Lower Mess Creek Stikine Canyon	Stikine Canyon			
Elaeagnus commutata – Apocynum androsaemifolium – "Agropyron boreale" – Stipa hymenoides	Eroding slopes in scrub-steppe		Near confluence of Stikine and Tuya rivers, probably elsewhere in the canyon			
Juniperus horizontalis – Artemisia frigida – Calamagrostis purpurascens	Very dry boreal steppe on eroded, weakly calcareous soils	Klastline Stikine Canyon	Stikine Canyon			
Amelanchier alnifolia – Elymus trachycaulus	Warm dry steep, southwest facing slopes		+			
Alpine Tundra						
Kobresia myosuroides – Hierochloe alpina – Rhacomitrium lanuginosum – lichen	Very exposed alpine tundra on windswept ridgecrests	+		+	+	
Poa rupicola – Agropyron violaceum	Grassy promontories where sheep and goats graze and rest; lush, well manured	+		+	+	+
Mineral springs						
Salix brachycarpa – Muhlenbergia richardsonis	Extensive calcite formations	Mess Lake				
Calamagrostis stricta – Muhlenbergia richardsonis – Eleocharis quinqueflora	Extensive calcite formations	Mess Lake				
Boreal White and Black Spruce and Spruce Willow Birch – Partially stabilized talus slopes						
Dryopteris fragrans – Rhacomitrium lanuginosum – Umbilicaria spp.	Partially stabilized talus slopes	Mount Edziza Klastline	+	+	+	Likely
Juniperus communis – Arctostaphylos uva-ursi – Dryopteris fragrans	Partially stabilized talus slopes	Mount Edziza Klastline	+	+	+	Likely

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[1] Mount Edziza RMZ = Mount Edziza Resource Management Zone

[2] Locality of occurrence, +=present, likely = likely

Appendix 3. Table 5. Typical Historic Patterns of Wildfire Disturbance for Biogeoclimatic Zones in Stikine Country Protected Areas (Parminter 1992).

Zone	Cover type	Fire type	Fire Intensity	Mean Fire Return Interval[1] (years)			Fire size (ha)		
				Minimum	Average	Maximum	Minimum	Average	Maximum
BWBS	Black Spruce[2]	Surface and crown	Medium-high	50-75	75-125	125-175	3-5	3000-10000	200000
	Aspen/ Pine/ Spruce			75-100	100-150	140-250			
	Pine/ Spruce/ Fir			100-150	150-200	200-300			
SWB	Fir/ Spruce	Surface and crown	Medium-high	150-200	200-350	350-500	3-5	150-2000	>5000
ESSF	Pine/ Spruce/ Fir	Surface	Low-medium	150-200	200-300	350-500	0.1-5	50-150	150-500
		Surface and crown	Medium-high						
AT		Surface	Low-medium	250	300-400	500-600	0.1-5	5-50	50-150

[1] Mean fire interval refers to the average length of time for fire to return to a site; some sites will burn more frequently while others may not experience fire for significantly longer periods

[2] Spruce = white spruce

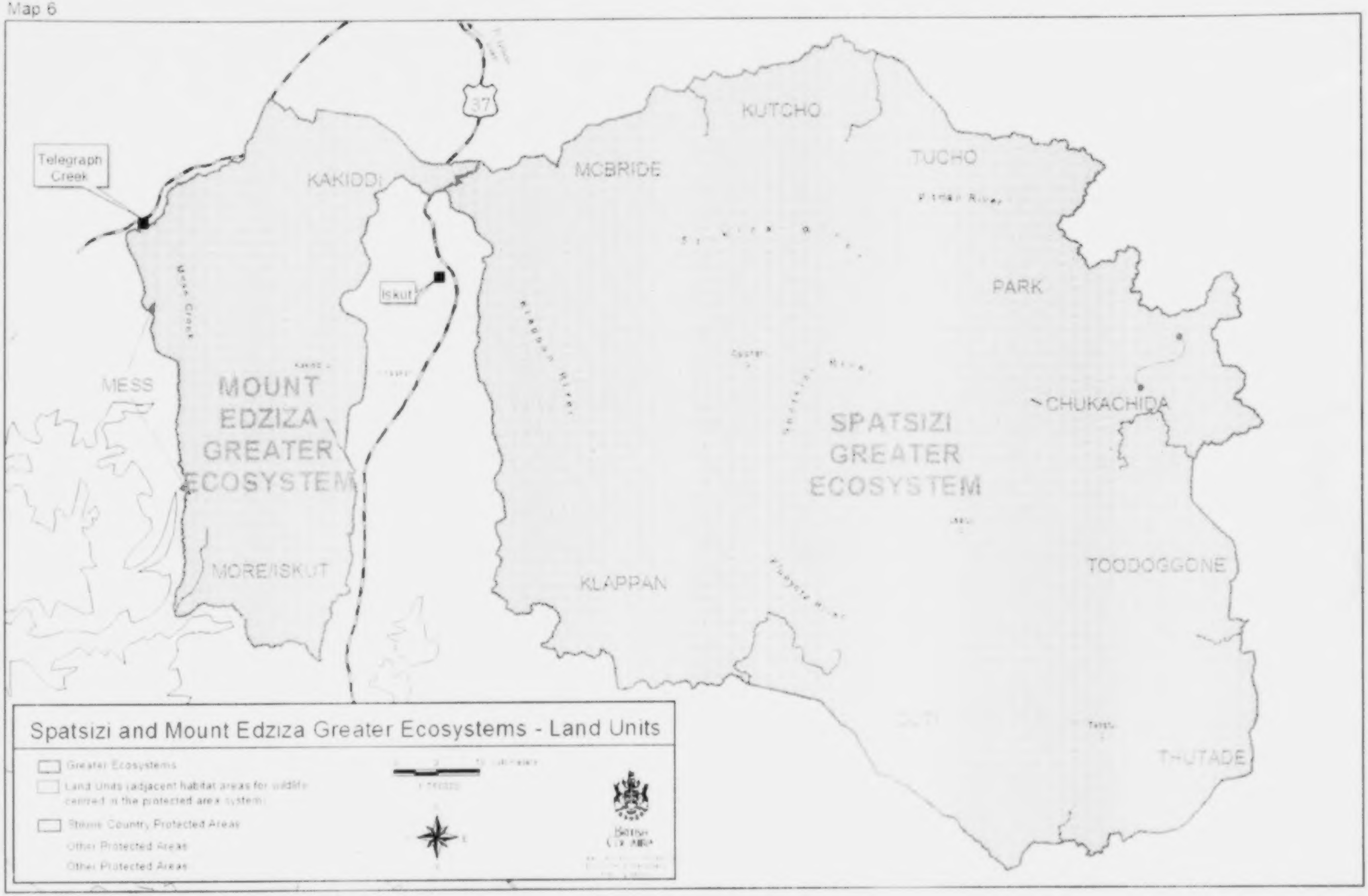
19 Appendix 4. Stikine Country Protected Areas Values, Issues and Concerns on Adjacent Lands

Information in this appendix for land units adjacent to Stikine Country Protected Areas relates to protected area values in Stikine Country Protected Areas. Map 6 shows the land units in the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem. Protected area values describe natural (mostly wildlife) and cultural heritage values that primarily use or are associated with Stikine Country Protected Areas. Other values may also occur within those land units but are not described below if they do not contribute to protected area values. For example, for the Klappan land unit, values are described with respect to Spatsizi caribou and moose populations; Stone's sheep and Stone's sheep habitat are also present but are not considered part of the Spatsizi Plateau Wilderness Provincial Park Stone's sheep population or range and are not included as part of the values. Issues and concerns are based on protected area values within the land unit, and on protected area values within the Stikine Country Protected Areas System.

Map 6. Spatsizi and Mount Edziza Greater Ecosystems Land Units.

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/approved/map06_land.pdf

Map 6


Telegraph Creek
37
KAKIDDI
MCBRIDE
KUTCHO
TUCHO
Iskut
Mess Creek
MESS
MOUNT EDZIZA GREATER ECOSYSTEM
MORE/ISKUT
Klappan River
KLAPPAN
PARK
CHUKACHIDA
SPATSIZI GREATER ECOSYSTEM
TOODOGGONE
THUTADE
Spatsizi and Mount Edziza Greater Ecosystems - Land Units
Greater Ecosystems
Land Units (adjacent habitat areas for wildlife centred in the protected area system)
Stikine Country Protected Areas
Other Protected Areas
Other Protected Areas
British Columbia

Appendix 4. Stikine Country Protected Areas Values, Issues and Concerns on Adjacent Lands.

Land Unit	Protected Area Values	Issues/Concerns	LRMP	LRMP Resource Management Zone	LRMP Resource Management Category
McBride	• Spatsizi caribou low elevation winter range along McBride River • Spatsizi caribou winter range (high and low elevation) • Spatsizi caribou calving, summer and rutting habitat (high and low elevation)	• Effects of future forest harvesting on low elevation caribou winter range along McBride River. • Effects of potential future industrial access on Spatsizi caribou and caribou habitat. • Effects of potential future industrial activities on water quality of streams in Stikine River Provincial Park.	Cassiar Iskut-Stikine	McBride	General with Area Specific Management
				General	General
Kutcho	• Spatsizi caribou winter range (high and low elevation) • Spatsizi caribou calving, summer and rutting habitat (high and low elevation)	• Uncertainty of land management policies for this area. • Effects of current and potential future industrial access (originating from the Jade Road) on Spatsizi caribou and caribou habitat.	Dease-Liard	(LRMP not yet underway)	
Tucho	• Spatsizi caribou calving, summer, rutting and winter habitat • Spatsizi moose summer and winter habitat	• Effects of potential future industrial access and activities on Spatsizi caribou and caribou habitat and Spatsizi moose and moose habitat. • Effects of potential future industrial activities on water quality of streams, and bull trout in Stikine River Provincial Park and Pitman River Protected Area.	Cassiar Iskut-Stikine	Hottah-Tucho Lakes	General with Area Specific Management
Park	• Spatsizi caribou calving, summer, rutting and winter habitat • Spatsizi moose calving and summer habitat	• Effects of potential future industrial access and activities on Spatsizi caribou and caribou habitat and Spatsizi moose and moose habitat. • Impacts of potential future industrial activities on water quality of streams and bull trout in Stikine River Provincial Park, Pitman River Protected Area and Chukachida Protected Area.	Cassiar Iskut-Stikine	General	General
Chukachida	• Spatsizi caribou calving, summer and rutting habitat • Spatsizi moose calving and summer habitat	• Effects of the decommissioned road from Sturdee airstrip to Albert's Hump and current ATV and snowmobile use of that road on Metsantan and other protected area values. • Impacts of potential future industrial access and activities on Spatsizi caribou and caribou habitat and Spatsizi moose and moose habitat. • Effects of potential future industrial activities on water quality of streams and bull trout in Stikine River Provincial Park and Chukachida Protected Area. • Effects of potential future industrial access on Metsantan, and on recreational use of the Stikine River canoe route.	Cassiar Iskut-Stikine	Chukachida	General

Appendix 4. Stikine Country Protected Areas Values, Issues and Concerns on Adjacent Lands.

Land Unit	Protected Area Values	Issues/Concerns	LRMP	LRMP Resource Management Zone	LRMP Resource Management Category
Toodoggone	• Spatsizi caribou calving, summer and rutting habitat • Spatsizi caribou rutting habitat on Edozadelly Mountain • Spatsizi caribou winter habitat along Sturdee River and Toodoggone River • Tatlatui moose winter habitat along Sturdee River and Toodoggone River	• Effects of the decommissioned road from Sturdee airstrip to Albert's Hump and current ATV and snowmobile use of that road on the southeastern portion of Spatsizi Plateau Wilderness *Provincial Park*. • Effects of potential future industrial access and activities on Spatsizi caribou and caribou habitat and Spatsizi moose and moose habitat, especially winter range along the Toodoggone River, rutting areas in the Edozadelly Mountain area, and winter range (lichen flats) along the upper Sturdee River. • Effects of ATV and snowmobile activity originating from the Omineca Mining Road on caribou and moose and their fall and winter range along the upper Sturdee River. • Effects of ATV and snowmobile activity originating from the Omineca Mining Road and entering Tatlatui Provincial Park.	Mackenzie	Firesteel	Wild land
				Thutade	Mining and Wildlife Special
Thutade	• Spatsizi caribou calving, summer and rutting habitat • Spatsizi caribou fall migration across Thutade Lake • Tatlatui mountain goat winter and kidding areas on north side of Thutade Lake • Tatlatui grizzly bear spring habitat on north side of Thutade Lake	• Effects of potential future industrial access and activities on Spatsizi caribou and caribou habitat, Spatsizi moose and moose habitat, Tatlatui mountain goats and mountain goat habitat, and Tatlatui grizzly bears and their habitat. • Effects of the current access to Thutade Lake from the Omineca Mining Road on Tatlatui mountain goats, caribou, grizzly bears and Stone's sheep using south facing slopes on the north side of Thutade Lake. • Impacts caused by ATV and snowmobile activity originating from the Omineca Mining Road and entering Tatlatui Provincial Park. • Effects of potential access to Tabletop Mountain on Spatsizi caribou and moose and Tatlatui Stone's sheep, mountain goats and grizzly bears. • Effects of potential introductions of fish species (primarily bull trout) into Tabletop Creek that could potentially spread into the Firesteel River system.	Mackenzie	Firesteel	Wild land
				Thutade	Mining and Wildlife Special
Duti	• Spatsizi caribou calving, summer and rutting habitat • Tatlatui Stone's sheep range • Tatlatui grizzly bear spring habitat.	• Effects of potential future industrial access and activities on Spatsizi caribou and caribou habitat, Spatsizi moose and moose habitat, Tatlatui mountain goats, Stone's sheep and grizzly bears and their habitat. • Effects of potential future industrial access on recreational access to and use of Spatsizi and Tatlatui provincial parks, especially in the Fire Flats and upper Duti River areas.	Fort St. James	Groundhog	Special
				Skeena	Multipurpose

Appendix 4. Stikine Country Protected Areas Values, Issues and Concerns on Adjacent Lands.

Land Unit	Protected Area Values	Issues/Concerns	LRMP	LRMP Resource Management Zone	LRMP Resource Management Category
Klappan	• Spatsizi caribou low elevation winter range along the lower portion of the Klappan River • Spatsizi caribou calving and summer habitat (high and low elevation) • Spatsizi moose winter range along the Klappan River	• Effects of potential future industrial access and activities on Spatsizi caribou and caribou habitat, Spatsizi moose and moose habitat, and grizzly bears and their habitat. • Effects of potential future industrial access on recreational access to and use of Spatsizi Plateau Wilderness Provincial Park. • Access on the BC Rail grade.	Cassiar Iskut-Stikine	Klappan	General with Area Specific Management
				Todagin	General with Area Specific Management
				Iskut Lakes	General with Area Specific Management
				General	General
			Kalum	(LRMP not yet underway)	
Kakiddi	• Mount Edziza/Stikine moose winter habitat • Klastline deer habitat • Rainbow trout only fish system • creek drainage into Kakiddi Lakes chain and Klastline River • viewscape from Kakiddi Lakes chain	• Effects of potential future industrial access and activities on Mount Edziza caribou and caribou habitat, Mount Edziza and Stikine moose and moose habitat, Klastline deer and deer habitat, and Stikine mountain goats and their habitat. • Impacts of potential future industrial activities and access on water quality of streams and the rainbow trout only fish system in the Kakiddi Creek drainage, and on water quality and aquatic habitat in the Klastline River drainage. • Effects of potential future industrial access on recreational access to and use of Mount Edziza Provincial Park, and the proposed Mount Edziza Protected Area, and Stikine River Provincial Park.	Cassiar Iskut-Stikine	Kakiddi/ Mowdade/ Nuttlude Lakes	General with Area Specific Management
				General	General
Mount Edziza Mineral Claims	• Mount Edziza caribou, Stone's sheep, mountain goat and moose habitat • Rainbow trout only fish system • Creek drainage into Kakiddi Lakes chain • viewscape from Kakiddi Lakes chain • Pipe Organ Mountain	• Effects of potential future industrial access and activities on Mount Edziza caribou, Stone's sheep, mountain goats, moose and their habitat. • Effects of potential future industrial activities and access on water quality of streams and the rainbow trout only fish system in the Kakiddi Creek drainage. • Impacts of potential future industrial access on recreational access to and use of Mount Edziza Provincial Park and the proposed Mount Edziza Protected Area.	Cassiar Iskut-Stikine	Mount Edziza	General with Area Specific Management

Appendix 4. Stikine Country Protected Areas Values, Issues and Concerns on Adjacent Lands.

Land Unit	Protected Area Values	Issues/Concerns	LRMP	LRMP Resource Management Zone	LRMP Resource Management Category
Iskut/More	• Mount Edziza Stone's sheep and mountain goat range	• Effects of potential future industrial access and activities on Mount Edziza Stone's sheep and mountain goats and their habitat • Effects of potential future industrial access in the More Creek area on recreational access to and use of Mount Edziza Provincial Park	Cassiar Iskut-Stikine	Middle Iskut	General with Area Specific Management
				General	General
Mess	• creek drainage into Mess Creek	• Effects of potential future industrial access and activities, especially along Mess Creek and Shaft Creek on recreational access to and use of Mount Edziza Provincial Park. • Effects of potential future industrial activities and access on water quality of streams in the Mess Creek drainage.	Cassiar Iskut-Stikine	General	General

20 Appendix 5. Agreement between BC Parks and the Tahltan Joint Councils

PURPOSE

This agreement seeks to define the government to government relationship between the Tahltan Joint Councils and BC Parks (the parties) with respect to existing and new protected areas within the traditional territory of the Tahltan Band Council and the Iskut Band Council as representatives of the Tahltan Nation.

BC Parks seeks direct advice and information from the Tahltan Joint Councils regarding protected areas within the Tahltan traditional territory in order to ensure these areas are protected and sustained for the benefit of all British Columbians now and in the future.

The Tahltan Joint Councils seek to provide direct advice to BC Parks regarding the management and sustainability of protected areas to ensure that lands are protected and sustained for Tahltan traditional use and practices and the continued exercise of traditional rights within Tahltan traditional territory.

GENERAL

This agreement and the establishment of new protected areas are without prejudice to any aboriginal rights, title or interest of the Tahltan and Iskut First Nations and, with the consent of both parties on renewal, may continue until such time as the rights and responsibilities of the Tahltan Joint Councils in respect to protected areas are more permanently defined in treaties, court decisions or otherwise.

This agreement is without prejudice to the position that either party may take in future treaty negotiations.

The parties will work together in a spirit of cooperation, respect and friendship to address matters of mutual interest and in a manner consistent with a government to government relationship.

Any recommendations and actions resulting from this agreement must be in accordance with the Park Act, Ecological Reserves Act or other applicable legislation, regulations and policies.

Existing rights and tenures within protected areas will be honoured.

The operation of this agreement will not unduly delay decisions that need to be made by BC Parks to provide for the management and operation of protected areas.

PROTECTED AREAS COMMITTEE

The parities will establish a protected areas committee comprised of up to 4 representatives appointed by the Tahltan Joint Councils and up to 4 representatives appointed by BC Parks. Representatives appointed by BC Parks may include third party stakeholders with a demonstrated interest in protected areas.

At the request of either party, meetings or portions of meetings may involve Tahltan First Nation and BC Parks staff only due to the sensitive government to government nature of information under discussion e.g. location of cultural heritage sites that the Tahltan First Nation do not want to be in the public domain.

The committee will operate on a consensus basis and will meet 2-4 times per year in locations and at times agreed by its members.

The committee will provide a forum for the parties to share information, discuss issues and where appropriate make recommendations with respect to protected areas. The committee may deal with the following matters and any other matters mutually agreed upon:

- preparation and review of management plans and management direction statements.
- review of annual management plans and capital development projects.
- review of applications for commercial permits and other uses.
- identification and facilitation of the exercise of aboriginal rights and traditional uses by the Tahltan First Nations.
- sharing of information and undertaking inventories of cultural heritage, wildlife, recreation and other resources.
- accurate description of the culture and history of the Tahltan First Nation in any communications and extension materials or activities developed with respect to protected areas.
- identification and facilitation of economic opportunities and employment by members of the Tahltan First Nation associated with protected areas.
- the establishment of new protected areas under the provincial government's Protected Areas Strategy.
- past grievances of the Tahltan First Nations including the burning of Tahltan trapping cabins in the 1950's, the process for the establishment of the Stikine Recreation Area and definition of Tahltan traditional gathering and trapping rights with respect to the Park Act and BC Parks enforcement policies.

The Tahltan Joint Councils will require a formal information protocol that guarantees confidentiality and assures protection of archaeological and heritage sites and values prior to any exchange of cultural and heritage information.

The committee will develop a detailed terms of reference and may develop an action plan to guide its operation including specific objectives, procedures, evaluation methods and other matters mutually agreed upon. The action plan will be submitted to the parties for approval and be subject to available funding.

TERM AND AMENDMENT

This agreement is for a period of 5 years subject to renewal by mutual consent of the parties.

This agreement may be amended by the mutual consent of both parties and be terminated by either party on 6 months written notice.

Should the operation of this agreement negatively impact the interests or rights of other First Nations whose traditional territories overlap with those of the Tahltan First Nations or third parties, then the parties will endeavour to establish solutions, to the satisfaction of the other First Nations or third parties.

COSTS OF PARTICIPATION AND IMPLEMENTATION

The parties will endeavour to work together to secure funding from other sources to help offset the costs of the parties and initiatives related to protected areas.

This agreement dated 16 June 2000.

(Original signed by:)

H. Markides
District Manager, BC Parks

L. Louie
Yvonne Tashoots
Chiefs, Tahltan Joint Councils

21 Appendix 6. Significant physical features of Stikine Country Protected Areas

Appendix 6. Significant Physical Features of Stikine Country Protected Areas.

	Mount Edziza Provincial Park and proposed Mount Edziza Protected Area	Mount Edziza RMZ[1]	Stikine River Provincial Park	Pitman River Protected Area	Chukachida Protected Area	Spatsizi Plateau Wilderness Provincial Park	Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Water features	Mess Creek Canyon		Grand Canyon of the Stikine River					
Hot springs	Taweh Creek Elwyn Creek Mess Creek Mess Lake							
Physical features	Tahltan Eagle	Pipe Organ Mountain				Complex folds (Eaglenest Range); Spatsizi (Red Goat) Mountain	Complex folds (Eaglenest Range)	Complex folds
Fossils						Ammonites (Eaglenest Range)	Ammonites (Eaglenest Range)	
Volcanic features	Mount Edziza Eve Cone Coffee Crater Cocoa Crater Spectrum Range Obsidian							

[1] Mount Edziza RMZ = Mount Edziza Resource Management Zone

22 Appendix 7. Wildlife Features of Stikine Country Protected Areas

Appendix 7. Table 1. Expected and Recorded Occurrences of Wildlife Species in Stikine Country Protected Areas.

Expected Occurrence	Mount Edziza Provincial Park, proposed Protected Area and RMZ[1]	Stikine River Provincial Park	Spatsizi Plateau Wilderness Provincial Park and Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Meadow vole	+[1]	+	+	+
Long-tailed vole			+	
Mountain heather-vole			+	
Boreal red-backed vole			+	
Tundra red-backed vole	+	+	+	+
Siberian lemming			+	+
Northern bog-lemming			+	
Western Jumping mouse			+	+
Deer mouse	+	+	+	+
Navigator shrew			+	
Cinereus shrew			+	
Wandering shrew			+	
Little brown bat			+	
Western spotted frog			S	+
Northwestern toad			+	
Northern wood frog			+	
Long-toed salamander			S	

[1] Mount Edziza RMZ = Mount Edziza Resource Management Zone

[2] + = recorded occurrence; S=suspected occurrence

Appendix 7. Table 2. Recorded Occurrences of Bird Species in Stikine Country Protected Areas. (+ = recorded occurrence; U = unconfirmed report).

	Mount Edziza Provincial Park, proposed Protected Area and RMZ[1]	Stikine River Provincial Park	Spatsizi Plateau Wilderness Provincial Park and Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Common Loon	+		+	+
Yellow-billed Loon			+	
Arctic Loon	+		+	
Red-throated Loon			+	
Red-necked Grebe	+	+	+	
Horned Grebe	+	+	+	
Tundra Swan			+	
Trumpeter Swan		+		
Canada Goose	+	+	+	+
Mallard	+	+	+	+
Green-winged Teal	+	+	+	+
American widgeon	+	+	+	
Northern pintail	+	+	+	+
Northern Shoveler	+		+	
Blue-winged Teal			+	+
Redhead			+	
Ring-necked Duck		+	+	
Greater Scaup	+	+	+	+
Lesser Scaup	+		+	+
Black Scoter			+	
White-winged Scoter	+		+	+
Surf Scoter	+		+	+
Harlequin Duck			+	+
Oldsquaw	+			+
Barrow's Goldeneye		+	+	+
Common Goldeneye	+		+	+
Bufflehead	+	+	+	+
Common merganser	+	+	+	+
Red-breasted Merganser			+	
American Coot	+			
Semipalmated Plover	+		+	+
Killdeer			+	
Black-bellied Plover			+	
Lesser Golden Plover	+		+	
Whimbrel			+	
Greater Yellowlegs	+	+	U	+
Lesser Yellowlegs			+	+
Solitary Sandpiper	+		+	+
Spotted Sandpiper	+	+	+	+
Wandering Tattler	+		+	
Red-necked Phalarope	+		+	+
Long-billed Dowitcher	+		+	
Common Snipe	+		+	+
Sanderling			+	+
Semipalmated Sandpiper	+		+	+
Western Sandpiper		+	+	+
Least Sandpiper	+		+	+
Upland Sandpiper			+	
Long-tailed Jaegar			U	U
Bonaparte's Gull	+		+	+
Mew Gull	+		+	+
Herring Gull	+	+	+	+
California Gull			+	
Glaucous Gull			+	
Glaucous-winged Gull				+
Arctic Tern	+		+	+
Golden Eagle	+	+	+	+
Bald Eagle	+	+	+	+

Appendix 7. Table 2. Recorded Occurrences of Bird Species in Stikine Country Protected Areas. (+ = recorded occurrence; U = unconfirmed report).

	Mount Edziza Provincial Park, proposed Protected Area and RMZ[1]	Stikine River Provincial Park	Spatsizi Plateau Wilderness Provincial Park and Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Northern Harrier	+	+	+	+
Sharp-shinned Hawk	+	+	+	
Northern Goshawk	+		+	+
Red-tailed Hawk	+		+	
Rough-legged Hawk			+	
Osprey	+		+	+
American Kestrel	+	+	+	+
Merlin	+		+	+
Peregrine Falcon	+		U	
Gyrfalcon	+	+	+	+
Ruffed Grouse	+	+	+	+
Spruce Grouse	+	+	+	+
Blue Grouse			+	+
White-tailed Ptarmigan	+		+	
Rock Ptarmigan	+		+	+
Willow Ptarmigan	+		+	+
Sharp-tailed Grouse	+			
Mourning Dove			+	
Short-eared Owl			+	
Great Horned Owl	+	+	+	
Northern Pygmy-Owl			+	
Northern Hawk-Owl	+		+	
Boreal Owl		+		
Common Nighthawk	+	+	+	+
Rufous Hummingbird	+		+	
Belted Kingfisher	+		+	
Northern Flicker	+	+	+	+
Yellow-bellied Sapsucker		+	+	
Downy Woodpecker			+	
Hairy Woodpecker		+	+	
Black-backed Woodpecker	+	+	+	
Northern three-toed Woodpecker		+		
Olive-sided Flycatcher			+	+
Western Wood Pewee	+	+	+	
Eastern Phoebe			+	
Say's Phoebe	+	+	+	+
Hammond's Flycatcher			+	
Least Flycatcher			+	
Willow Flycatcher			+	
Alder Flycatcher		+		
Yellow-bellied Flycatcher			+	
Horned Lark	+	+	+	+
Tree Swallow		+	+	+
Violet-green Swallow		+	+	
Bank Swallow		+	+	
Northern Rough-winged Swallow		+	U	+
Cliff Swallow	+		+	+
Barn Swallow		+	+	+
Stellar's Jay			+	+
Gray Jay	+	+	+	+
Black-billed Magpie		+		
American Crow	+		+	+
Common Raven	+	+	+	+
Black-capped Chickadee	+	+	+	+
Mountain Chickadee	+		+	
Boreal Chickadee	+	+	+	+
Red-breasted Nuthatch	+	+	+	
Winter Wren	+	+	+	

Appendix 7. Table 2. Recorded Occurrences of Bird Species in Stikine Country Protected Areas. (+ = recorded occurrence; U = unconfirmed report).

	Mount Edziza Provincial Park, proposed Protected Area and RMZ[1]	Stikine River Provincial Park	Spatsizi Plateau Wilderness Provincial Park and Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Golden-crowned Kinglet		+	+	+
Ruby-crowned Kinglet	+	+	+	+
Mountain Bluebird		+	+	
Townsend's Solitaire	+	+	+	
Swainson's Thrush		+	+	+
Gray-cheeked Thrush		+	+	+
Hermit Thrush		+	+	+
Varied Thrush	+	+	+	
American Robin	+	+	+	+
Northern Wheatear	+		+	
Northern Shrike			+	
Water Pipit	+	+	+	+
American Dipper	+	+	+	+
Bohemian Waxwing	+	+	+	+
Cedar Waxwing	+		+	
European Starling			+	
Solitary Vireo			+	
Warbling Vireo		+	+	
Tennessee Warbler			+	
Orange-crowned Warbler		+	+	
Black-and white Warbler			+	+
Yellow-rumped Warbler	+	+	+	+
Townsend's Warbler		+	+	
Blackpoll Warbler		+	+	+
Yellow Warbler		+	+	+
MacGillivray's Warbler		+	+	
Wilson's Warbler	+	+	+	+
Northern Waterthrush			+	+
Common Yellowthroat	+	+	+	+
American Redstart		+	+	+
Le Conte's Sparrow			+	
Savannah Sparrow	+	+	+	+
Song Sparrow	+	+		+
American Tree Sparrow	+	+	+	+
Chipping Sparrow		+	+	+
Dark-eyed Junco	+	+	+	+
White-crowned Sparrow	+	+	+	+
Golden-crowned Sparrow	+	+	+	+
Fox Sparrow			+	
Lincoln's Sparrow		+	+	+
Smith's Longspur			+	+
Lapland Longspur			+	
Snow Bunting	+		+	+
Western Meadowlark			+	
Red-winged Blackbird	+		+	+
Rusty Blackbird	+	+	+	+
Brewer's Blackbird			+	
Brown-headed Cowbird	+	+	+	+
Common Grackle			+	
Western Tanager		+	+	
Pine Siskin		+	+	+
White-winged Crossbill	+		+	
Pine Grosbeak		+	+	+
Common Redpoll	+		U	
Hoary Redpoll			U	
Rosy Finch	+		+	
Purple Finch		+	+	

[1] Mount Edziza RMZ = Mount Edziza Resource Management Zone

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23 Appendix 8. Hunting statistics for Stikine Country Protected Areas

Appendix 8. Summary of Hunting Regulations, Guide Quotas and Average Annual Harvests for Stikine Country Protected Areas 1999/2000. The Bag Limit for Each Species is 1. Guide Quotas are based on the Average Annual Quota for those Species with 3-year Quota Guidelines.

	Mount Edziza Provincial Park, proposed Protected Area and Resource Management Zone	**Stikine River Provincial Park[1]**		**Spatsizi Plateau Wilderness Provincial Park**	**Tatlatui Provincial Park**
Wildlife Management Unit	6-21	6-21 6-22	6-20A[2] (6-19)	6-20A[2]	7-39
Stone's sheep					
Regulation	LEH	Open	LEH		Closed
Season	Aug 1 – Oct 26	Aug 1 – Oct 15	Aug 1 – Oct 26		
Class	Full Curl	Full Curl	Full Curl		
# LEH permits	6	N/A	37		
Guide-Outfitter quota	1	(17)[3]	2 (19)[3]	7(2)[3,4]	
Average annual resident harvest (1990-1995)	0.7	0.0	0.5	3.7	
Average annual non-resident harvest (1990-1995)	0.7	0.0	1.5	7.0	
Mountain goat					
Regulation	LEH	Open	LEH/Closed[5]		Open
Season	Aug 1 – Oct 15	Aug 1 – Oct 15	Aug 1 – Oct 15		Aug 15 – Oct 15
Class	Adult only		Adult only		Adult only
# LEH permits	10	N/A	37		N/A
Guide-Outfitter quota	4	1	1(+)[3]	13(+)[3]	4(8)[6]
Average annual resident harvest (1990-1995)	1.0	1.0	0.5	3.5	2.0
Average annual non-resident harvest (1990-1995)	1.5	1.0	0.7	11.8	2.7
Caribou					
Regulation	Closed	Closed (6-21) Open (6-22)	LEH		LEH/Open[7]
Season		Aug 15 – Oct 10	Aug 15 – Oct 15		Aug 15 – Oct 15
Class		5 Point Bulls	Bulls only		Bulls only (LEH) 5 Point Bulls (Open)
# LEH permits		N/A	52		(14)[8]
Guide-Outfitter quota		(+)[3]	2(17+)[3]	20 (17)[3]	(12)
Average annual resident harvest (1990-1995)		0	0.0	7.8	0.0
Average annual non-resident harvest (1990-1995)		0	0.3	16.2	0.5
Moose					
Regulation	Open	Open	LEH		Open/LEH[9]
Season	Aug 15 – Nov 15	Aug 15 – Nov 15	Aug 15 – Nov 15		Aug 15 – Nov 5
Class	Bulls	Bulls	Bull only		Immature Bulls (Open) Bulls only (LEH)
# LEH permits	N/A	N/A	125		(85)[10]
Guide-Outfitter quota	(+)[3]	(+)[3]	10(11+)[3]	30(11)[3]	(11)
Average annual resident harvest (1990-1995)			8.7		
Average annual non-resident harvest (1990-1995)			22.5		

Appendix 8. Summary of Hunting Regulations, Guide Quotas and Average Annual Harvests for Stikine Country Protected Areas 1999/2000. The Bag Limit for Each Species is 1. Guide Quotas are based on the Average Annual Quota for those Species with 3-year Quota Guidelines.

	Mount Edziza Provincial Park, proposed Protected Area and Resource Management Zone	**Stikine River Provincial Park**[1]		**Spatsizi Plateau Wilderness Provincial Park**	**Tatlatui Provincial Park**
Wildlife Management Unit	6-21	6-21 6-22	6-20A[2] (6-19)	6-20A[2]	7-39
Grizzly bears					
Regulation	LEH	LEH	LEH		LEH
Season (spring)	April 15 – June 15	April 15 – June 15	April 15 – June 15		April 15 – June 15
Season (fall)	Sept 1 – Nov 15	Sept 1 – Nov 15	Sept 1 – Nov 15		Sept 1 – Nov 15
Class	Adult only	Adult only	Adult only		Adult only
# LEH permits	5	20[11] (6-21B) 25[11] (6-22)	7		(5)[10]
Guide-Outfitter quota	1(2)	0 (2)	3 (2)	1 (2)	(2)
Average annual resident harvest (1990-1995)	0.2	0.3	0.0	0.2	0.3
Average annual non-resident harvest (1990-1995)	0.0	0.0	0.2	1.3	0.8

[1] Stikine River Provincial Park is divided into two sections: east of Highway 37 (MU6-20A, 6-19) and west of Highway 37 (MU 6-21, 6-22)

[2] MU6-20A includes that portion of MU6-20 that lies within Spatsizi Plateau Wilderness Provincial Park and the former Stikine River Recreation Area and that portion of MU6-19 that lies within the former Stikine River Recreation Area; information presented in this table for Stikine River Provincial Park is based on the former Stikine River Recreation Area; season, class and number of LEH permits is reported for 6-20A as a whole but harvests are reported for each park (Stikine River, Spatsizi) separately

[3] (N)=Number of territory-wide guide quota (combined for all guides with portions of their territory in the park) with no specific reference to parks; + indicates no specific quota for the species; (N+) indicates 1 or more guides with a territory-wide quota and 1 or more guides with no species quota; for some parks although no specific species quotas for the park exists, that species may not be present in the portion of the guide's territory that lies within the park

[4] For Spatsizi Plateau Wilderness Provincial Park most of the park lies within 1 guide territory with park specific quotas; a small portion of a second guide's territory also lies within the park but that guide does not have park specific quotas; the small portion of the second guide's territory that lies within the park will be expanded with the Metsantan addition which is currently within MU6-20 but not a part of MU6-20A

[5] A small portion of MU6-20A (west side of the Spatsizi Plateau) is closed to mountain goat hunting

[6] Only 4 goats may be harvested from that portion of MU7-39 west of Thutade Creek, Thutade Lake, and the Firesteel River

[7] MU 7-39 zones B,C,D are LEH and include the northern part of Tatlatui Provincial Park north of the Firesteel River, Rognaas Creek, Kitchener Lake, Stalk Creek and Stalk Lake; the rest of the park is open for caribou hunting

[8] Total number of LEH permits for zones B,C,D of MU7-39; only portions of those zones occur within Tatlatui Provincial Park

[9] Both open and LEH applies to all of MU7-39; open season for Immature bulls only; LEH for Bulls only

[10] Total number of LEH permits for MU7-39; Tatlatui Provincial Park covers only a portion of 7-39

[11] Total number of LEH permits for zone B of MU6-21 and for MU6-22; Stikine River Provincial Park covers only a portion of both MU's

24 Appendix 9. Aquatic Characteristics of Stikine Country Protected Areas

Appendix 9. Table 1. Distribution of Freshwater Fish Species within Stikine Country Protected Areas.

	Arctic Grayling	Burbot	Dolly Varden/ Bull trout	Lake trout	Longnose sucker	Prickly sculpin	Rainbow trout	Rocky Mountain Whitefish
Mount Edziza Provincial Park, proposed Protected Area and Resource Management Zone								
Mowdade Lake							+	
Mowchilla Lake							+	
Kakiddi Lake							+	
Nuttlude Lake							+	
Stikine River Provincial Park (upstream of the Grand Canyon)[2]								
Stikine River	+	+	+	+	+	+	+	+
Spatsizi Plateau Wilderness Provincial Park								
Upper Stikine River	+	+	+	+	+	+	+	+
Tuaton Lake			+		+	+	+	+
Laslui Lake	+		+		+		+	+
Chukachida River	L		+				L	
Chapea Lake							+	
Ella Creek							+	
Ella Lake			+		L		+	L
Hotlesklwa Creek			L				+	+
Hotlesklwa Lake			+		+		+	+
Happy Lake							+	+
Spatsizi River	+	+	+		+		+	+
Kliweguh Creek			+					
Mink Creek	+		+	+			+	+
Cold Fish Lake	+	+	+	+		+	+	+
Buckinghorse Lake							+	
Klahowya Lake							+	
Tatlatui Provincial Park								
Tatlatui Lake							+	
Firesteel River							+	
Kitchener Lake							+	
Rognaas Creek							+	
Lower Stalk Lake							+	
Upper Stalk Lake							+	
Stalk Creek							+	
Trygve Lake							+	

[1] + = present; L = likely present

[2] includes Pitman River Protected Area and Chukachida Protected Area

Appendix 9. Table 2. Reported Relative Fish Size, Fish Density and Lake Characteristics of Selected Waters in Stikine Country Protected Areas. (DeGisi 1998).

	Relative Fish Density	Relative Fish Size	Relative Lake depth	Relative lake productivity	Comments
Mount Edziza Provincial Park, proposed Protected Area and Resource Management Zone					
Mowdade Lake	High	Small	Shallow	Moderate	
Mowchilla Lake	High	Small	Shallow	Moderate	
Kakiddi Lake	High	Small	Shallow	Moderate	
Nuttlude Lake	High	Small	Shallow	Moderate	
Spatsizi Plateau Wilderness Provincial Park					
Tuaton Lake			Moderate	Low	Cold
Chapea Lake	High	Small			
Hotlesklwa Creek					Moderate amount of good fish habitat
Hotlesklwa Lake			Moderate	Low-moderate	
Kliweguh Creek					Likely used by bull trout for spawning at locations where they are vulnerable to harvest
Cold Fish Lake			Deep	Low	Cold
Buckinghorse Lake	Low	Large	Moderate	Moderate	Spawning habitat does not appear limiting
Klahowya Lake	Low	Large	Shallow	Low	Low fish density and large size of fish is possibly because of limited spawning or rearing habitat
Tatlatui Provincial Park					
Tatlatui Lake	High	Moderate	Deep	Low	
Firesteel River	Very high	Small - Moderate			Fish density atypically high
Kitchener Lake		Large	Deep	Low	
Lower Stalk Lake	Low	Large	Shallow	Low	

Appendix 9. Table 3. Summary of General and Special Angling Regulations for Stikine Country Protected Areas 2000/2001.		
	Tatlatui Provincial Park[1] (Region 7)	**All other parks** (Region 6)
General regulations – daily catch quotas		
Trout/char	5	5
- Over 50 cm (includes steelhead)	No more than 1	No more than 1
- Dolly Varden/bull trout and lake trout combined	No more than 3	No more than 3
- From streams	No more than 2	No more than 2
- Under 30 cm from streams	-	0[2]
Burbot	-	5
Whitefish (all species combined)	-	15
Arctic grayling	-	3
General regulations		
No fishing April 1 – June 30	All streams	Iskut River streams (upstream of Forest Kerr Canyon)
Barbless hooks[3]		All streams
Single hook	All streams	All streams
Bait ban	All streams	
Set lining		Burbot
Special Regulations		
Trout/char daily and possession quota = 2 (none over 50 cm)		Buckinghorse Lake Klahowya Lake
Rainbow trout daily quota = 2	Tatlatui Lake	
Rainbow trout daily quota = 2 (none over 50 cm), No fishing Nov 1 – Apr 30		Buckley Lake
No fishing within 100 metres of outlet May 15 - July 31		Buckinghorse Lake Klahowya Lake
Single hook		Buckinghorse Lake Klahowya Lake
Single barbless hook		Buckley Lake
Bait ban	Stalk Lakes	Buckinghorse Lake Klahowya Lake Buckley Lake

[1] Regulations for Tatlatui Provincial Park include only those regulations in Region 7 pertaining to rainbow trout and Tatlatui Provincial Park waters (Peace River watershed)

[2] Catch and release only

[3] Barbless hooks for all Pacific streams in Regions 6 and 7

Appendix 9. Table 4. Number of Rod Days Allocated for Guided Angling for Waters in Stikine Country Protected Areas.

Waters	# rod days	# angling guides
Stikine River Provincial Park		
Stikine River	245	3
Tahltan River[1]	90	2
Stikine River Provincial Park/Chukachida Protected Area		
Chukachida River/Stikine River[2]	20	1
Chukachida Protected Area		
Chukachida Lake	120	3
Pitman River Protected Area		
Pitman Lake	85	1
Spatsizi Plateau Wilderness Provincial Park		
Buckinghorse Lake	88	1
Chapea Creek	12	1
Chapea Lake	12	1
Cold Fish Lake	192	1
Ella Creek	96	1
Ella Lake	96	1
Hotlesklwa Lake	40	1
Klahowya Lake	30	1
Laslui Lake	260	1
Mink Creek	192	1
Tuaton Lake	190	1
Tatlatui Provincial Park		
Firesteel River	-	3
Kitchener Lake	-	2
Rognass Creek	-	2
Stalk Lake	-	2
Tatlatui Lake	-	1

[1] Angler days on the Tahltan River are currently allocated for the Stikine River Recreation Area; the Tahltan River is outside of Stikine River Provincial Park

[2] Angler days were allocated for the Chukachida and Stikine rivers combined

25 Appendix 10. Structures in Stikine Country Protected Areas.

Appendix 10. Structures in Stikine Country Protected Areas.

Provincial Park	Location	Site	Facilities	Facility Details
Mount Edziza – Commercial	Buckley Lake	EC1	Guide-outfitter Camp, 5 structures	3 tent frames, 1 corral, 1 tree cache
	Chakima Creek	EC2	Guide-outfitter Camp	Tent camp Fire ring, tent poles, food cache
	Williams Camp	EC3	Guide-outfitter Camp	Tent camp Fire ring, tent poles, food cache
Mount Edziza – Public	Buckley Lake	EP1	4 structures	1 Dock, 1 info shelter, 1 bear cache, 1 bridge
	Mowdade Lake	EP2	4 Structures	1 Dock, 1 info shelter, 1 bear cache, 1 bridge
	Trail from Buckley to the alpine	EP3	1 structure	800 metres of split log
	Buckley Lake Area	EP3	3 structures	Remains of three old cabins
	Across from Telegraph Creek	EP4	Approximately 8 structures	Old Tahltan Village site
	Three Mile Lake Area	EP5	2 structures	Sam Berger's Old Cabin
	Chakima Creek Trail	EP6	2 structures	2 bridges
	Klastline River	EP7	bridge	1 bridge
Mess Creek - Commercial	Mess Lake	MC1	Trappers cabin and outbuildings	1 cabin
	Mess Creek 1	MC2	Trappers Cabin	Unknown
	Mess Creek 2	MC3	Trappers Cabin	Unknown
Stikine River – Commercial; Permanent	Chukachida River	SRC1	Guide-outfitter Camp	1 cabin, 1 pit toilet
	Cullivan Creek	SRC2	Guide-outfitter Camp	Tent camp, tent poles only
	McBride Creek	SRC3	Trapping cabin	1 cabin, 1 storage shed, 1 pit toilet
	Upper Stikine Lodge	SRC4	Guide-outfitter Camp	1 cookhouse/lodge, 2 cabins, 1 barn, 1 tack shed, 1 dock, 1 meat and fuel shed, 1 corral, 1 storage shed, 1 pit toilet
	Stikine River	SRC6	BCR Rail Bridge	Unused bridge
	Mount Meehaus	SRC7	NW Tel Repeater	1 Communication shell
Stikine River – Public	Beggarly Canyon	SRP1	Bridge and Campsite	Bridge, campsite
	Park Creek	SRP2	Old Guide Camp, 6 structures	Remains of 3 cabins, 1 tent frame, 1 pit toilet, 1 corral
	Upper Stikine	SRP3	Public cabin, 2 structures	1 cabin, 1 treasure chest toilet

Appendix 10. Structures in Stikine Country Protected Areas.

Provincial Park	Location	Site	Facilities	Facility Details
Pitman River – Commercial	Pitman Lake	PC1	Guide-outfitter Camp	Unknown
Chukachida	Chukachida Lake	CC1	2 commercial camps	About 5 structures
Gladys Lake Ecological Reserve	Gladys Lake	GP1	Research Cabin	1 Cabin
	Gladys Lake	GP1	Old camp, 2 structures	1 Food cache, 1 fallen tent frame
	McMillan Camp	GP2	Old camp, 2 structures	1 Food cache, 1 picnic table
Spatsizi – Commercial – Permanent	Bear Creek	SC1	Guide-outfitter Camp	1 Tent Frame
	Buckinghorse Lake	SC2	Guide-outfitter Camp	1 cookhouse, 2 tent frames, 1 shower tent, 1 corral, 1 storage shed, 1 pit toilet
	Bug Lake	SC3	Guide-outfitter Camp	1 cookhouse, 1 dock, 3 cabins, 1 duplex, 1 woodshed, 1 meat house, 1 tack shed, 1 corral, 1 dock, 1 pit toilet, 1 garden shed, 1 horse shoeing shelter, 1shower building, 1 root cellar, 1 food cache
	Cold Fish Lake – rainbow	SC4	Guide-outfitter Camp, 3 structures	1 cabin, 1 dock, 1pit toilet
	Ella Lake	SC5	Guide-outfitter Camp, 1 structure	1 cabin
	Laslui Lake	SC6	Guide-outfitter Camp, 18 structures	1 cookhouse, 2 duplexes, 1 tack shed, 2 woodsheds, 1 meat house/storage shed, 1 dock, 2 yurts, 1water tank, 3 outhouses, 1 fuel storage, 1cabin, 1 wash house, 1 composting toilet (double), 1 corral
	Ross River	SC7	Guide-outfitter Camp	1 tent frame, 1 tree cache, 1 corral
	Tuaton Lake	SC8	Guide-outfitter Camp, 3 structures	1 tent frame, 1 wood shed, 1 pit toilet
	Black Jack Mt	SC14	NW Tel Repeater	1 communication shell
Spatsizi – Private Inholding	Hyland Post	SC15	Guide-outfitter Camp	About 12 structures (private land)
Spatsizi – Commercial: Tent Camps	Cache Creek	SC9	Guide-outfitter Camp	Tent Camp1 tent frame, 1 corral, 1 food cache
	Dawson River	SC10	Guide-outfitter Camp	Tent Camp tent poles, table and food cache
	MacDonald Creek	SC11	Guide-outfitter Camp	Tent Camp tent poles, table, food cache
	Ram Creek	SC12	Guide-outfitter Camp	Tent Camp tent poles, table, food cache
	Waterfall Creek	SC13	Guide-outfitter Camp	Tent Camp tent poles, table, food cache

Appendix 10. Structures in Stikine Country Protected Areas.

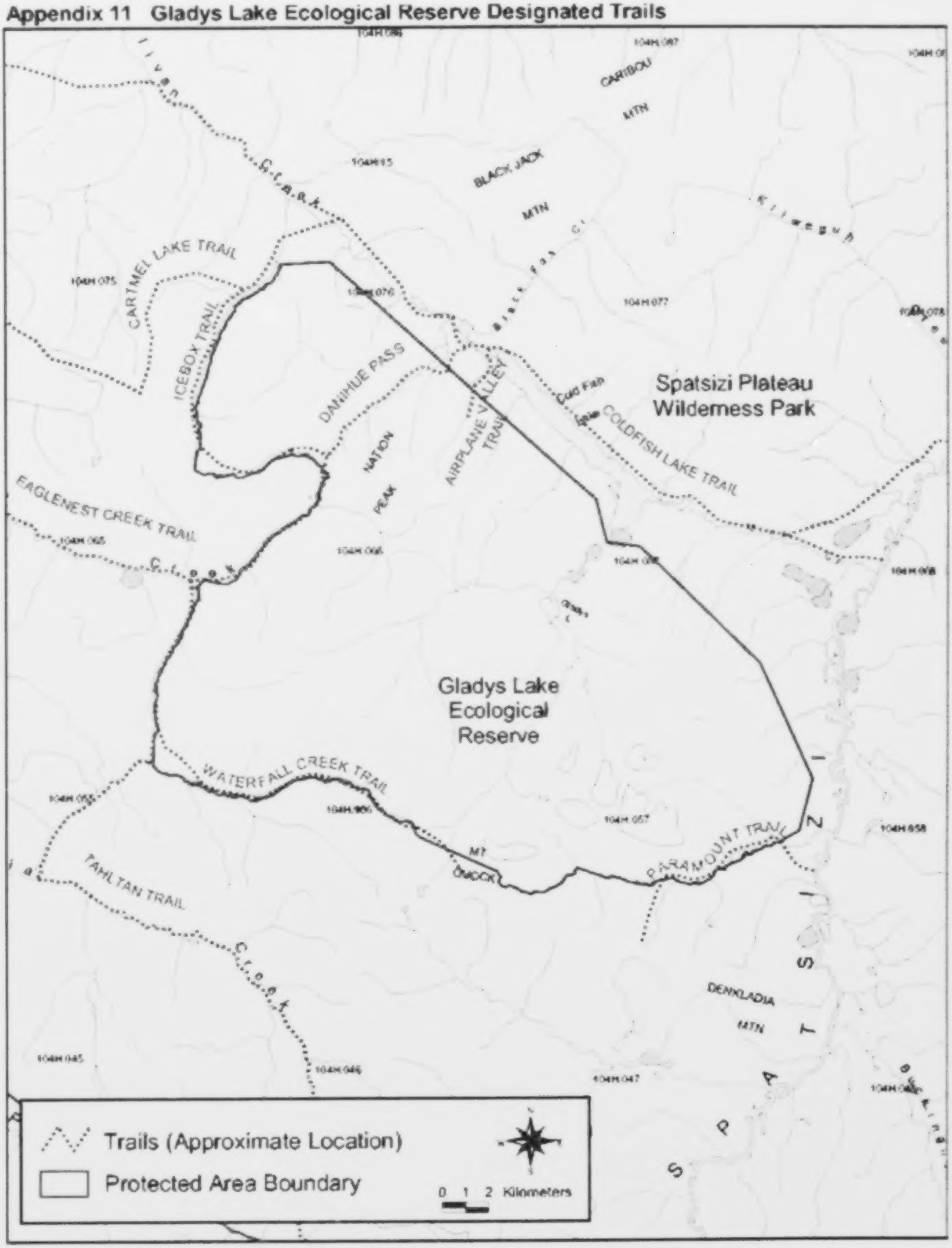
Provincial Park	Location	Site	Facilities	Facility Details
Spatsizi – Public	Chapea Creek	SP1	Campsite	Campsite1 pit toilet
	Airplane Valley	SP15	1 structure	1 foot bridge
	Cold Fish Lake	SP2	22 Structures	1 cookhouse, 8 cabins, 1 tack shed, 1 corral, 2 storage shed, 1 dock, 1 shower building, 1 old cookhouse, 1 meat cache, 3 pit toilets, 1 water system, 1 wood shed
	Cold Fish Lake East end	SP5	3 structures	1 table, 1corral, tent poles, 1 food cache
	Eaglenest Creek Trail Tsargoss Lake Camp	SP7	1 structure	Remains of old cabin
	Eaglenest Creek Trail	SP8	1 structure	1 km of split log
	Little Blue Berry Creek Camp	SP9	1 structure	1 bridge
	Eaglenest Creek Trail Campsite #3	SP10	1 structure	1 bridge
	Danihue Pass Trail	SP11	2 structures	2 small foot bridges
	Didene Creek	SP3	Campsite, 3 structures	Campsite, toilet, info shelter, food cache
	Tuaton Lake	SP12	Campsite, 2 structures	1 backcountry pit toilet, 1 info shelter
	Fountain Rapids	SP4	Campsite, 2 structures	Campsite, 1 backcountry toilet, 1 canoe rest
	Metsantan	SP6	Old Tahltan Village	1 guide-outfitter cabin, 1 wood shed, 1 tent frame, and approximately 14 historical cabins
	Black Fox Creek	SP13	Bridge	1 bridge
	Porcupine Hotel	SP14	Cabin	1 cabin
Tatlatui - Commercial	Firesteel River	TC1	Guide-outfitter Camp, 5 structures	1 cabin, 1 tent frame, 1 shower, 1 storage shed, 1 pit toilet
	Firesteel River	TC2	Guide-outfitter Camp, 10 structures	1 cookhouse, 3 cabins, 1 storage shed, 2 pit toilets, 1 shower, 1 dock, 1 smoke house
	Kitchener Lake	TC3	Guide-outfitter Camp, 10 structures	1 cookhouse, 3 cabins, 1 shower, 1 dock, 1 meat house, 1 storage shed, 2 pit toilets
	Stalk Lake	TC4	Guide-outfitter Camp, 8 structures	2 cabins, 1 shower/storage building, 2 pit toilets, 1 cook house, 1 meat shed, 1 dock
	Tatlatui Lake	TC5	Guide-outfitter Camp, 14 structures	4 cabins, 2 tent frames, 1 dock, 1 storage shed, 1 fuel shed, 1 shower building c/w septic tank, 1 wood shed, 2 pit toilets, 1 cookhouse/lodge
Tatlatui – Public	Kitchener Lake	TP1	Public cabin, 3 structures	1 cabin, 1 storage shed, 1 pit toilet.

26 Appendix 11. Gladys Lake Ecological Reserve Designated Trails

http://wlapwww.gov.bc.ca/bcparks/planning/mgmtplns/stikine/approved/gladyslake.pdf

Appendix 11. Map of Gladys Lake Ecological Reserve Designated Trails.

Appendix 11 Gladys Lake Ecological Reserve Designated Trails


Spatsizi Plateau Wilderness Park
Gladys Lake Ecological Reserve
CARIBOU MTN
BLACK JACK MTN
NATION PEAK
MT OMOCK
DENKLADIA MTN
CARTMEL LAKE TRAIL
ICEBOX TRAIL
DAWHUE PASS
AIRPLANE VALLEY TRAIL
COLDFISH LAKE TRAIL
Cold Fish Lake
EAGLENEST CREEK TRAIL
WATERFALL CREEK TRAIL
PARAMOUNT TRAIL
TAHLTAN TRAIL
Creek
Creek
Creek
Klinegun
Black Fox Cr.
SPATSIZI
104H.086
104H.087
104H.085
104H.075
104H.076
104H.077
104H.078
104H.065
104H.066
104H.068
104H.055
104H.056
104H.057
104H.058
104H.045
104H.046
104H.047
104H.048
Trails (Approximate Location)
Protected Area Boundary
0 1 2 Kilometers
N
S

27 Appendix 12. Example of fuel handling and storage and waste management guidelines

Currently, the following fuel storage and handling guidelines apply to only one commercial operator in Stikine Country Protected Areas:

- As fuel storage presents a potential for environmental contamination the permittee must adhere to the following storage guidelines:
    - Maximum of 5 drums stored at one time;
    - Drums must be in new to good shape;
    - Drums must be stored at least 50 metres from the river (high water mark);
    - Drums must not be visible to the general public;
    - Drums must be stored in a vertical position, covered by a tarp if necessary;
    - No fuel may be stored over the winter;
    - All empty drums must be removed;
    - No fuel sales;
    - Have a 45 gallon drum on site with a removable lid and have store inside a shovel for digging a trench or scooping up contaminated soil, absorbent pads to soak up fuel spills on land/water, and garbage bags, or alternatively, have a commercial fuel spill kit available in the boat;
    - If possible store drums in a location which would cause accidental spillage to flow away from the river; and,
    - The *Environmental Stewardship Division* area supervisor must approve all fuel storage locations.

No guidelines are in place for propane storage and handling.

The following waste management guidelines apply for most permitted base camps:

- Adequate toilet facilities, as approved by the province, shall be provided and maintained by the permittee. No toilet shall be located nearer than 45 metres from the high waterline of any pond, lake, stream or river.
- Sanitary wastes shall be disposed of in accordance with the *Litter Act, Waste Management Act* and to the satisfaction of the province.
- All garbage, debris or effluent resulting from uses under the permit shall be burned. All unburned garbage (tin cans, bottles, discarded metals, etc) shall be removed from the park to the satisfaction of the province. All empty fuel drums shall be removed from the park.

28 Appendix 13. Environmental Stewardship Division Protected Areas Management Planning Zone Descriptions.

Environmental Stewardship Division Protected Areas Management Planning Zone Descriptions					
	Intensive Recreation	Natural Environment	Special Feature	Wilderness Recreation	Wilderness Conservation
Objective	To provide for a variety of readily accessible, facility-oriented outdoor recreation opportunities	To protect scenic values and to provide for backcountry recreation opportunities in a largely undisturbed natural environment.	To protect and present significant natural or cultural resources, features or processes because of their special character, fragility and heritage values	To protect a remote, undisturbed natural landscape and to provide backcountry recreation opportunities dependent on a pristine environment where air access may be permitted to designated sites	To protect a remote, undisturbed natural landscape and to provide unassisted backcountry recreation opportunities dependent on a pristine environment where no motorized activities will be allowed.
Use Level	Relatively high density and long duration types of use	Relatively low use but higher levels in association with nodes of activity or access.	Generally low	Very low use, to provide solitary experiences and a wilderness atmosphere. Use may be controlled to protect the environment.	Very low use, to provide solitary experiences and a wilderness atmosphere. Use may be controlled to protect the environment.
Means of Access	All-weather public roads or other types of access where use levels are high (see "Impacts" below)	Motorised (powerboats, snowmobiles, all terrain vehicles), non-motorised (foot, horse, canoe, bicycles). Aircraft and motorboat access to drop-off and pickup points will be permitted.	Various, may require special access permit	Non-mechanized, except may permit low frequency air access to designated sites and motorboat access in accordance with the Stikine Country Protected Areas Management Plan: foot, canoe (horses may be permitted)	Non-mechanized (no air access); foot, canoe (horses may be permitted)
Location	Contiguous with all-weather roads and covering immediate areas, modified landscapes or other high-use areas	Removed from all-weather roads but easily accessible on a day-use basis. Accessible by mechanised means such as boat or plane	Determined by location of special resources; may be surrounded by or next to any of the other zones	Remote; not easily visited on a day-use basis	Remote; not easily visited on a day-use basis
Size of Zone	Small - usually less than 2,000 ha.	Can range from small to large	Small, usually less than 2000 hectares	Large, greater than 5,000 hectares.	Large, greater than 5,000 hectares.
Boundary Definition	Includes areas of high facility development in concentrated areas	Boundaries should consider limits of activity/facility areas relative to ecosystem characteristics and features	Area defined by biophysical characteristics or the nature and extent of cultural resources (adequate to afford protection)	Defined by ecosystem limits and geographic features. Boundaries will encompass areas of visitor interest for specific activities supported by air access.	Defined by ecosystem limits and geographic features.
Recreation Opportunities	Vehicle camping, picnicking, beach activities, power-boating, canoeing, kayaking, strolling, bicycling, historic and nature appreciation, fishing, snowplay, downhill and cross-country skiing, snowshoeing, specialised activities	Walk-in/boat-in camping, powerboating, hunting, canoeing, kayaking, backpacking, historic and nature appreciation, fishing, cross-country skiing, snowmobiling, river rafting, horseback riding, heli-skiing, heli-hiking, and specialized activities.	Sight-seeing, historic and nature appreciation. May be subject to temporary closures or permanently restricted access	Backpacking, canoeing, kayaking, river rafting, nature and historic appreciation, hunting, fishing, cross-country skiing, snowshoeing, horseback riding, specialized activities (e.g. caving, climbing)	Backpacking, canoeing, kayaking, river rafting, nature and historic appreciation, fishing, cross-country skiing, snowshoeing, horseback riding, specialized activities (e.g. caving, climbing)

Environmental Stewardship Division Protected Areas Management Planning Zone Descriptions

	Intensive Recreation	Natural Environment	Special Feature	Wilderness Recreation	Wilderness Conservation
Facilities	May be intensely developed for user convenience. Campgrounds, landscaped picnic/play areas, trail accommodation or interpretative buildings, boat launches, administrative buildings, service compounds, gravel pits, disposal sites, wood lots; parking lots, etc.	Moderately developed for user convenience. Trails, walk-in/boat-in campsites, shelters, accommodation buildings may be permitted; facilities for motorized access e.g. docks, landing strips, fuel storage, etc.	Interpretative facilities only, resources are to be protected.	Minimal facility development for user convenience and safety, and protection of the environment e.g. trails, primitive campsites, etc. Some basic facilities at access points, e.g. dock, primitive shelter, etc.	None.
Impacts on Natural Environment	Includes natural resource features and phenomena in a primarily natural state but where human presence may be readily visible both through the existence of recreation facilities and of people using the zone. Includes areas of high facility development with significant impact on concentrated areas.	Area where human presence on the land is not normally visible, facility development limited to relatively small areas. Facilities are visually compatible with natural setting.	None, resources to be maintained unimpaired.	Natural area generally free of evidence of modern human beings. Evidence of human presence is confined to specific facility sites. Facilities are visually compatible with natural setting.	Natural area generally free of evidence of modern human beings.
Management Guidelines	Oriented toward maintaining a high quality recreation experience. Intensive management of resource and/or control of visitor activities. Operational facilities designed for efficient operation while remaining unobtrusive to the park visitor.	Oriented to maintaining a natural environment and a high quality recreation experience. Visitor access may be restricted to preserve the recreation experience or to limit impacts. Separation of less compatible recreational activities and transportation modes. Designation of transportation may be necessary to avoid potential conflicts (e.g. horse trails, cycle paths, hiking trails).	High level of management protection with ongoing monitoring. Oriented to maintaining resources and, where appropriate, a high quality recreational and interpretative experience. Active or passive management depending on size, location, and nature of the resource. Visitor access may be restricted to preserve the recreation experience and to limit impacts.	Oriented to protecting a pristine environment. Management actions are minimal and not evident. Managed to ensure low visitor use levels. Visitor access may be restricted to protect the natural environment and visitor experience.	Oriented to protecting a pristine environment. Management actions are minimal and not evident. Managed to ensure low visitor use levels. Visitor access may be restricted to protect the natural environment and visitor experience.
Examples of Zoning	Campground in Rathtrevor Beach Provincial Park, Gibson Pass ski area in E.C. Manning Provincial Park.	Core area in Cathedral Park. North beach in Naikoon Provincial Park	Tidepools in Juan de Fuca Marine Provincial Park, Sunshine Meadows in Mount Assiniboine Provincial Park	Tchaikazan Valley in Ts'yl-os Provincial Park; Bowron Lake Chain in Bowron Lake Provincial Park	Upper Murray River watershed within Monkman Provincial Park. Garibaldi Provincial Park Nature Conservancy Area